Modern

LITHOGRAPHY

GEVAERT Copyline film... for precise, economical reproduction

Gevaert COPYLINE is the film specifically designed to give you precise reproduction at low cost. Because of its extremely contrasty orthochromatic emulsion, it is particularly suited to the detailed reproduction of engineering drawings, tracings and routine offset work by camera or contact. COPYLINE's light matte surface makes it simple to use any retouching procedure. There's no problem with minor miscalculations, either, because COPYLINE's latitude forgives and forgets. For scalpel-sharp reproduction, excellent contrast, fast and flat drying, get COPYLINE.

Litholine O 82p Film—maximum contrast, highest sensitivity, latitude and resolving power. Polystyrene base for utmost stability.

O 81 Litholine Ortho—0.003" thick; thin base for line or screen positives and negatives.

O 82 Litholine Ortho—in regular base, same emulsion—0.006" thick.

P 23 Film—a fast panchromatic emulsion. Long gradation, wide latitude in exposure and development. Ideal for color separation work.

Graphic P 2 Plate—for making separation negatives from color transparencies or copy. Same photographic characteristics as P 23 film.

GEVAERT

THE GEVAERT COMPANY OF AMERICA, INC.
321 West 54th Street, New York 19, N. Y.

District Offices: Lincolnwood, Ill. (Chicago) · Los Angeles · Dallas · Denver · San Francisco

Pressman Cecil Sawyer and Pressroom Superintendent Vic Shaw (left and center) check new Silver Gray Tru-Dot Blanket with R & P branch manager Bob Press. Shaw reports he has cut blanket costs 55% by standardizing on this R & P Blanket. And pressman Sawyer says his job is a lot easier—he doesn't have to keep changing blankets to print on different papers.

"My search for an all-purpose blanket is over —Roberts & Porter's Silver Gray Tru-Dot is it!"

Victor J. Shaw, Pressroom Superintendent, Baughman Company, Richmond, Virginia

BAUGHMAN COMPANY'S fame as a quality house has spread far beyond the borders of Virginia. And Vic Shaw has the reputation of being "the fussiest guy in the industry about dots." So it takes a lot for any product to meet their standards. Roberts & Porter's Silver Gray Tru-Dot Blanket has what it takes!

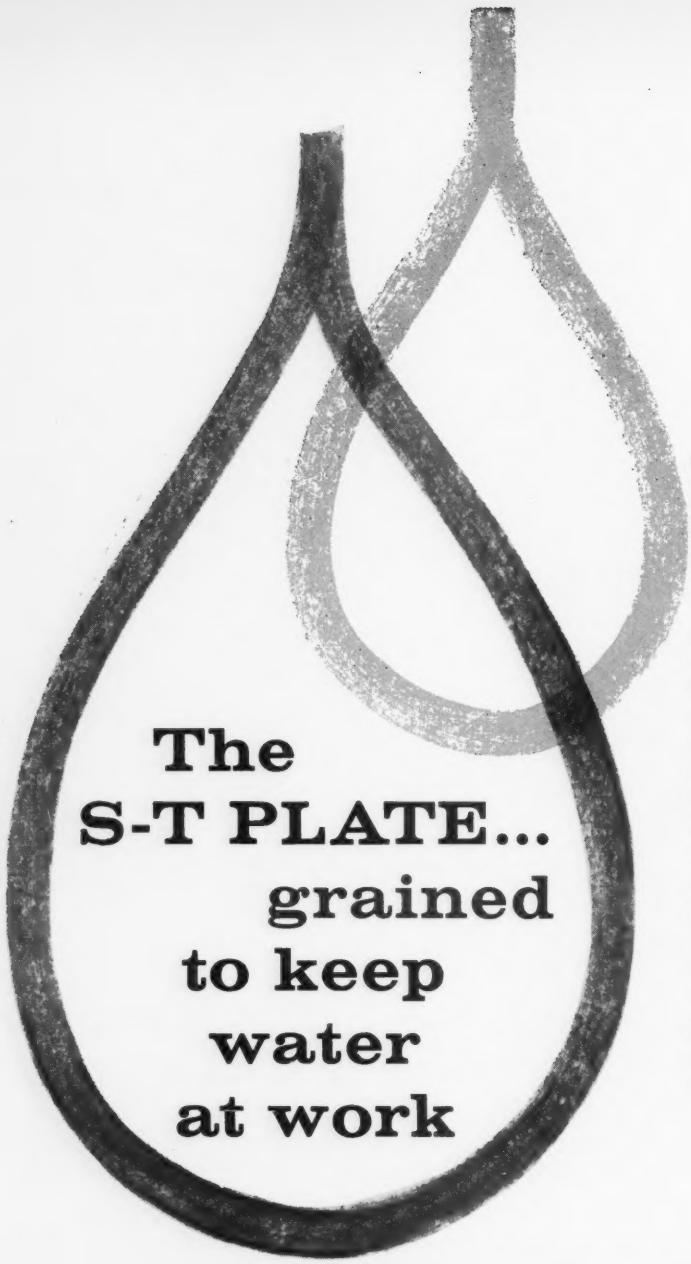
Vic Shaw says: "The Tru-Dot Blanket was named right! The dot on the plate winds up on the paper, reproduced with true fidelity. And the dot is what I'm interested in. We get the same kind of results on any paper—wove, coated, onion skin. Why we even use this blanket for acetate and foil! My search for an all-purpose blanket is over—Roberts & Porter's Tru-Dot is it!"

Freedom from embossing, excellent trapping, practically no piling, long "mileage." These are more advantages Vic Shaw reports he gets with R & P Silver Gray Tru-Dot Blankets. So, you've read the Tru-Dot story from the viewpoint of a recognized expert. Now you can understand why this new blanket is called the answer to a pressman's dream. And you can see why it will pay you to order your blanket requirements now from the Roberts & Porter branch near you.

ROBERTS & PORTER

INCORPORATED

CHICAGO • NEW YORK • BOSTON • BALTIMORE • CINCINNATI • CLEVELAND • DETROIT
KANSAS CITY • LOS ANGELES • MILWAUKEE • PHILADELPHIA • SAN FRANCISCO



Mechanically grained in precise manufacturing techniques, the S-T plate provides ideal retention of water on the press. The result is trouble-free performance with crisp, quality reproduction on runs of 100,000—and more—impressions.

The S-T Process, including grained plates and specially developed chemicals, is one sure way to control and reduce both platemaking and running time. Less time spent before the presses turn . . . less time wasted when the presses are running . . . are the double assurance that S-T Process helps you keep profits where you want them.

Complete stocks of S-T grained plates and S-T chemicals are now available to meet all press requirements. Check the Pitman office nearest you for complete information and supplies.

S-T plates are manufactured by Sumner Williams, Inc., and distributed nationally by the Harold M. Pitman Company.

Chicago 50, Illinois—33rd Street & 51st Avenue
Secaucus, New Jersey—515 Secaucus Road
New York 36, New York—230 West 41st Street
Cleveland 11, Ohio—3501 West 140th Street
Boston 10, Massachusetts—The Pitman Sales Company/266 Summer Street

Cover

It used to be that litho club announcements were pretty mundane things . . . not much more than a post card. Nowadays, as the cover photo shows, the clubs proudly bedeck their bulletins with photos, creative design, even process color. And, speaking of litho clubs, turn to page 39 for details of the NALC convention.

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MODERN LITHOGRAPHY

VOLUME 27, NUMBER 6 JUNE, 1959

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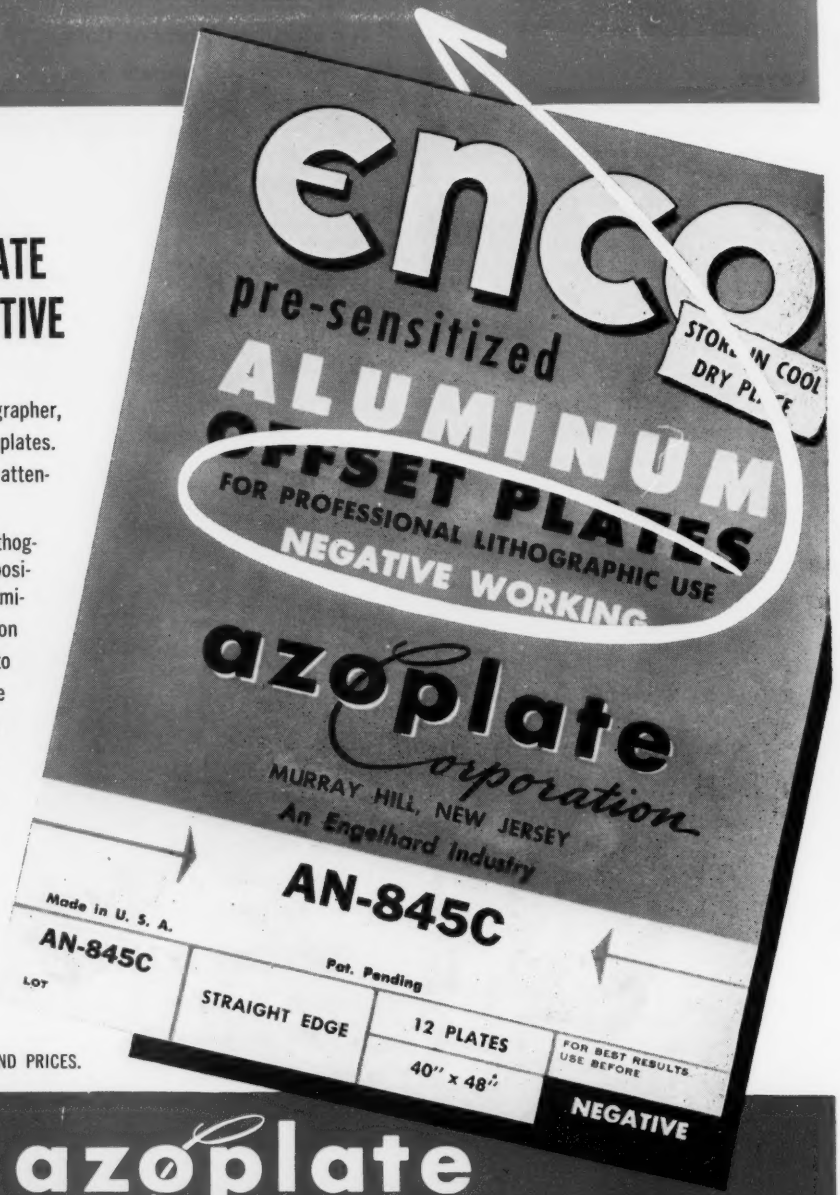
FOR PROFESSIONAL LITHOGRAPHIC USE



THE QUALITY PRE-SENSITIZED PLATE NEGATIVE and POSITIVE

We had YOU, the professional lithographer, in mind when we made the first Enco plates. The Enco label has always directed attention to this fact.

There are good reasons why lithographers prefer Enco Plates, either positive or negative. The fine grain eliminates problems of scratches, halation and plugged halftones and helps to keep ink and water in proper balance on the press. Exposure of Enco plates is not affected by heat or humidity. Extreme length of run is obtainable with Enco Long Run Lacquer, LR-2. For quality of work . . . with professional results . . . use Enco Pre-sensitized Plates. They are made to the standards of the critical lithographer.

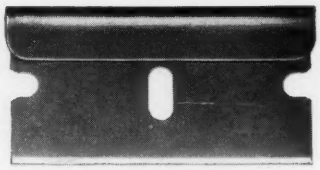
WRITE FOR TECHNICAL INFORMATION AND PRICES.

azoplate corporation
MURRAY HILL, NEW JERSEY
ENGELHARD INDUSTRIES

from Du Pont

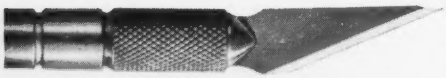
New Ortho B emulsion now on two flexible bases

Du Pont now offers you new, versatile Ortho B Litho emulsion with a choice of flexible bases . . .



CRONAR ⌖ Ortho B on .004″ and .007″ Cronar® polyester base; Acetate Ortho B on .0055″ acetate base.

Recently we announced fast, wide-latitude CRONAR Ortho B Litho Film, which combines an emulsion representing the optimum balance between high speed and extreme contrast with our dimensionally stable polyester base. Now, this same emulsion is available on regular acetate base, thus providing you with a choice of supports. You can easily standardize on one litho emulsion and select the base most suitable for a particular job.



Acetate Ortho B is designed particularly for those jobs that require extensive scoring and cracking during stripping. And, because of its unusually fine scribing qualities, it is ideal for work necessitating ruling and hand etching.

Why not take advantage *now* of having both CRONAR Ortho B and Acetate Ortho B working for you in your shop. Both films offer wide exposure and processing latitude, retain *all* of the fine detail on line shots and make halftones that have really crisp, hard dots. Try Du Pont Ortho B Litho—on *two* flexible bases.

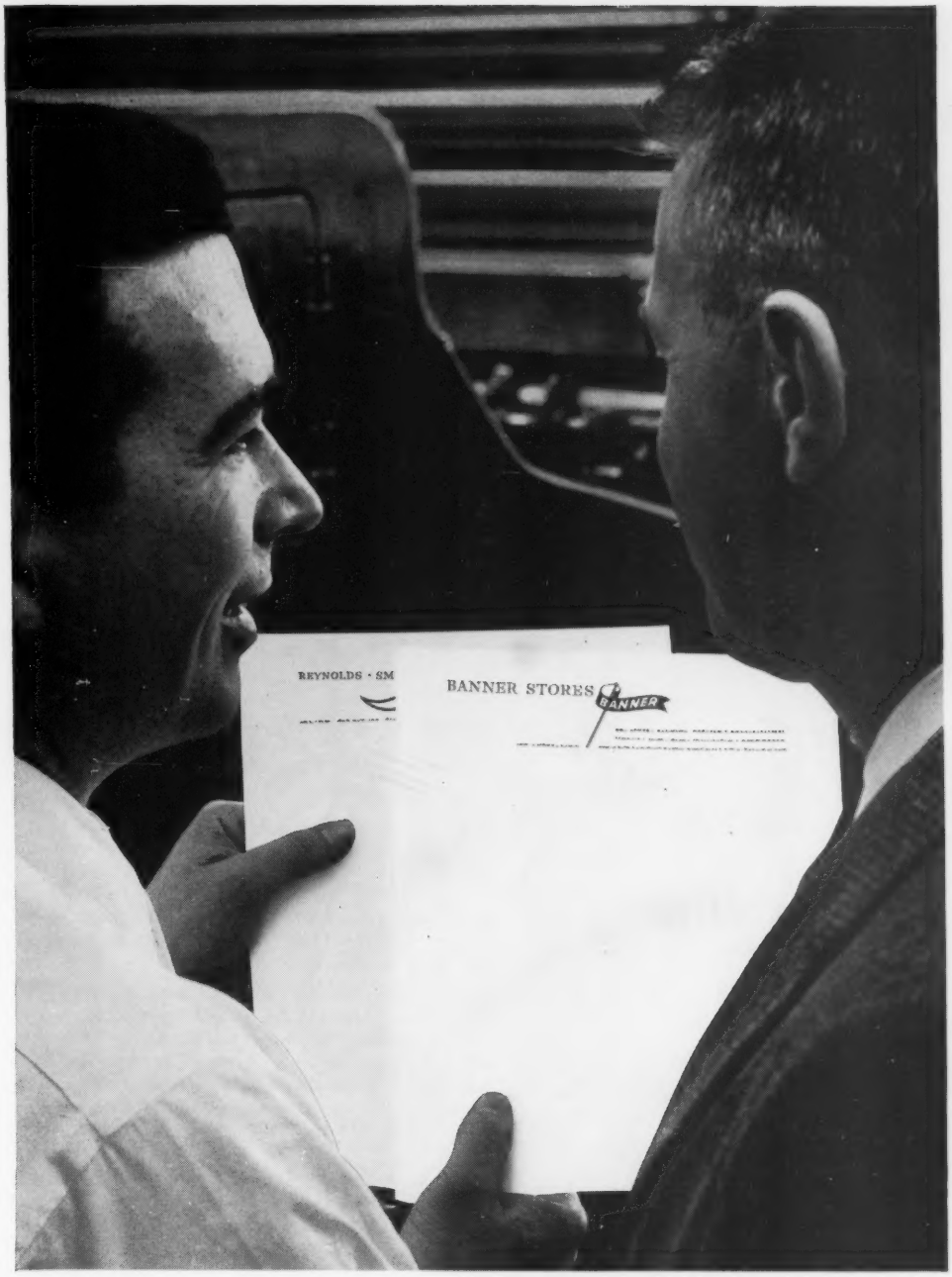
Call your dealer or contact your Du Pont Technical Representative for a demonstration. E. I. du Pont de Nemours & Co. (Inc.), Photo Products Department, Wilmington 98, Delaware. In Canada: Du Pont of Canada Limited, Toronto.

DU PONT
REG. U. S. PAT. OFF.

Better Things for Better Living
. . . through Chemistry

⌖ *Symbol and CRONAR are Du Pont trademarks for polyester graphic arts films.*

This advertisement was prepared exclusively by Phototypography.



HAMMERMILL

LOOK, MAC! NO COMPARISON!

New Hammermill Bond *does* give our jobs extra sparkle. The brighter white makes type stand out, sharp and clear. And Hammermill Bond is a fine-running sheet. It bulks up well. Lots of snap and crackle, too.

I know good paper when I see it. And this is the most uniform bond sheet Hammermill has ever turned out. Weight for weight it's more opaque, but it doesn't cost any more. It's the kind of paper that makes my job easier and makes all our customers happy. For my money we ought to run *all* our jobs on Hammermill. Hammermill Paper Company, Erie, Pennsylvania.

HAMMERMILL BOND

Announcing a great

NEW LINE

DOUTHITT

VACUUM

PRINTING FRAMES

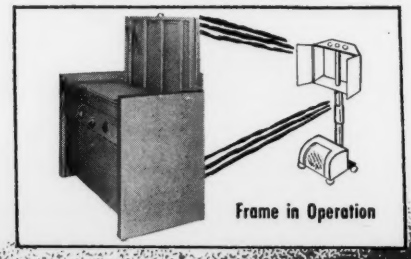
Modern styling with traditional Douthitt ease-of-operation

- professionally designed
- fresh, modern appearance
- rugged dependability
- instantaneous vacuum
- exclusive counterbalance
- full-size drawer

Greatest productivity, greatest ease of operation, greatest safety—*just great in every feature* of its modern design is the new Douthitt vacuum printing frame. Douthitt's traditional rugged dependability blended with a galaxy of new engineering achievements makes this absolutely the finest vacuum printing frame on the market today.

Finger tip control is achieved through use of Douthitt's exclusive, patented spring and fulcrum bracket, making light work of the swing to and from printing position. Automatic clamp prevents opening of glass frame until vacuum has been released, eliminating possibility of breaking glass and danger to personnel.

Incorporates separate standing arc lamp assuring complete and absolute overall light coverage to every corner of the image. No soft or weak images from light fall off. Vacuum reserve tank, automatic control switch, vacuum gauge, interval timer, pump, and motor are all standard equipment. Sizes 20 x 24 to 40 x 50 available.



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40 YEARS OF ACHIEVEMENT IN PHOTOMECHANICS

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CORPORATION

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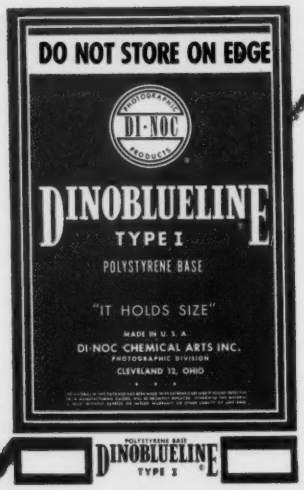
simpler
color
stripping,
use



A LABEL YOU SHOULD KNOW

DINOBLUELINE FILM

Making positive or negative images as guides for fake or process color stripping can be a simple and economical process—when you use Dinoblueline Film. Just expose the key flat to a sheet of ready-to-use Dinoblueline under a carbon arc and develop. The resulting image is sharp, accurate, ghost-free, dimensionally stable and easy to use . . . it will not photograph on any type of plate. In addition, you can use Dinoblueline in making surface or deep etch plates, or in photocomposition work.

Ordinary artifical lights will not affect the undeveloped Dinoblueline, so that setting up the blue key for exposure is simplified. After the blue key is made, stripping can be done directly to the emulsion side, tape can be applied and removed without disturbing the emulsion, opaqueing can be done with any standard solution.

Dinoblueline Film has a .010″ thick clear polystyrene base coated with a pre-sensitized, non-photographic blue key emulsion. Precise coating assures uniform thickness and coverage—the blue color remains consistent box after box. The heavy base provides excellent stability for accurate register.

Dinoblueline is available in standard sheet sizes ranging from 11″ x 14″ to 40″ x 60″—special sizes on request. Check with your local Di-Noc Dealer.

PHOTOGRAPHIC DI-NOC PRODUCTS

DI-NOC CHEMICAL ARTS, INC.

PHOTO PRODUCTS DIVISION • 1700 LONDON ROAD • CLEVELAND 12, OHIO

branch offices: New York City, 9 East 19th Street • Chicago, Illinois, 4522 West 16th Street • Utica, Michigan, 45834 Van Dyke Avenue
resident representatives: Washington, D. C.; Tulsa, Oklahoma; Rochester, New York; and San Francisco, California
subsidiary company: Di-Noc Chemical Arts (Canada) Limited, 565 Davenport Avenue, Toronto, Ontario, Canada

Why have more Miehle 38 two color offsets been installed than any other two color, of any size?

More Miehle 38 Two Color Offsets have been installed across the country in the last two years than any other two color, *of any size.*

The reason!! . . . performance.

Performance in *greater production . . . up to 20% more production* than any other press in the 25x38″ range.

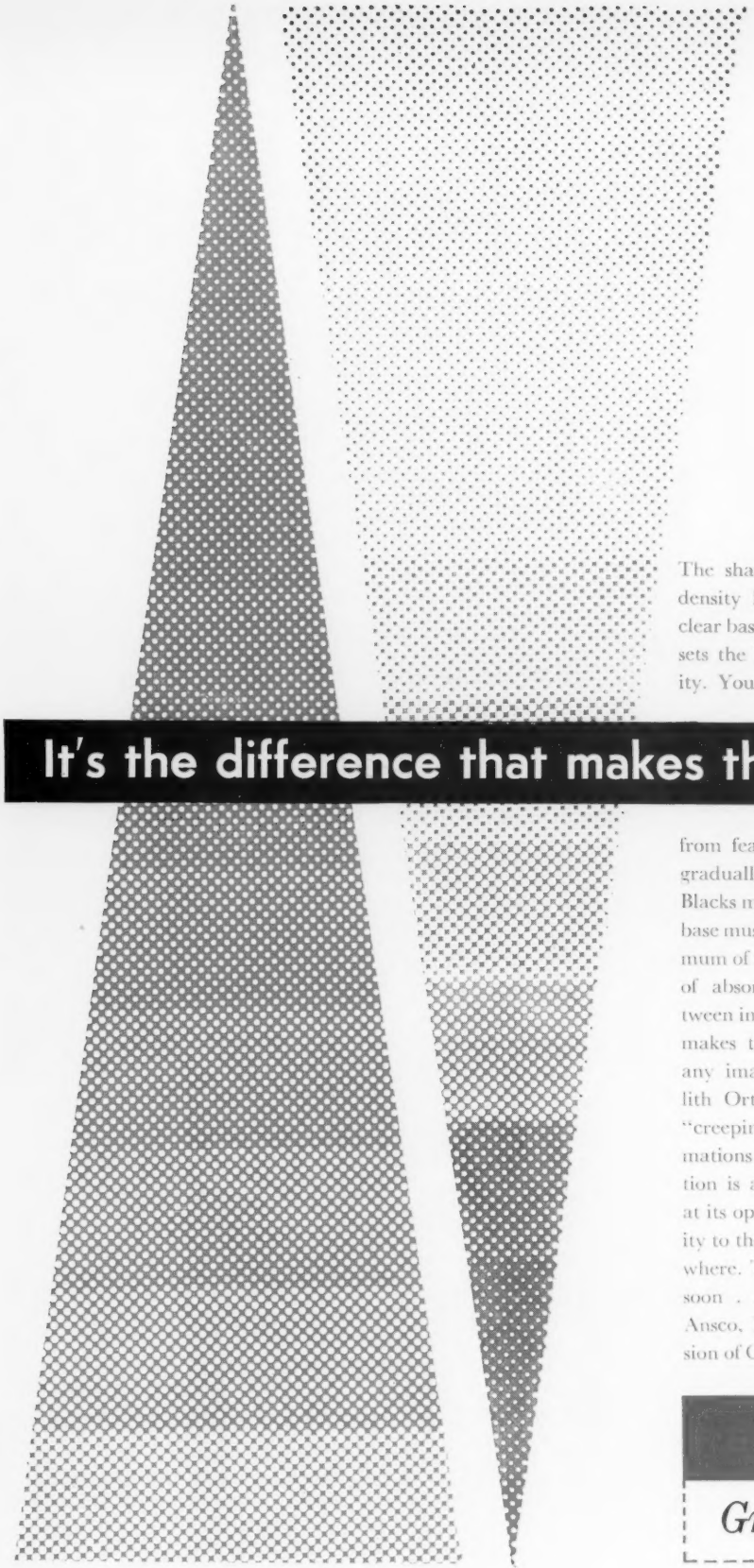
Performance in really *quality sheets* . . . consistent quality resulting from True Rolling, larger form rollers, and exact inking-dampening control from outside the press.

Performance in *workability* . . . giving pressmen the features which enable and encourage him to improve production and quality; plenty of working room that prevents struggling during wash-up and changeover—simplified feeder with a mechanical pile hoist and just one adjustment for changes in sheet size—precise adjustments that hold their settings throughout long runs, and thus require less attention.

Performance is the reason more Miehle 38 Two Color Offsets have been installed than any other two color . . . it's the most desirable lithographic press, in both single and two color models, in it's size. See the Miehle 38 in operation yourself . . . it'll be your choice, too.

For more details, write for folder M-38.

THE **MIEHLE** COMPANY
A DIVISION OF MIEHLE · GOSS · DEXTER, INC.
Chicago 8, Illinois



It's the difference that makes the difference

The sharp difference between high density line or dot formations and clear base is one important factor that sets the limits of reproduction quality. You just can't get clean results from feather edged dots that blend gradually into clear areas of the film. Blacks must be dense and sharp. Film base must be crystal clear with a maximum of transmission and a minimum of absorption. This difference between image and base is where Ansco makes the difference. Just examine any image made on Ansco Reprolith Ortho Type B film. No silver "creeping" here. Dot and line formations are dense and clean. Resolution is at its maximum and quality at its optimum with a sparkling clarity to the base that is unequaled anywhere. Try Reprolith Ortho Type B soon . . . and see the difference! Ansco, Binghamton, N. Y., A Division of General Aniline & Film Corp.

Ansco

Graphic Films

ANNOUNCING

SPECTRA '59

THE GRAPHIC ARTS EXPOSITION
OF INTERNATIONAL IMPORTANCE

you will see

Exhibits from the major graphic arts markets from every part of the world.

The latest developments and processes from Europe, Asia and United States.

Workshops, forums, seminars where the spectators can actually participate.

NEW YORK CITY
SEPT. 6th to 12th

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ITALY
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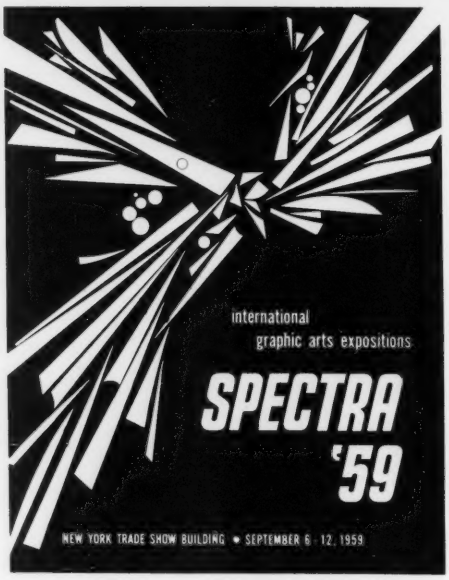
SWEDEN
SWITZERLAND
and the
UNITED STATES



Not affiliated with the 7th Educational Graphic Arts Exposition.

Spectra '59 is the first international graphic arts exposition to be held in the United States of America

For exhibit information write—Joseph Sugarman, Director of Spectra International Graphic Arts Exposition, Inc., 330 West 26th St., New York 1, N. Y.—YUkon 9-9725

Micrometric uniformity test assures even gauge for Vulcan blankets

...by making sure you get full productive mileage from every Vulcan Duroflex and Durofyne Offset Blanket!

He's a quality control expert with a staff of 24 people who never touch production, but are engaged full-time in quality *control*. They test and inspect every Vulcan offset blanket for even gauge. It's this extra measure of quality control that has helped to make Vulcan the world's largest manufacturer of offset blankets. Try a Vulcan Duroflex or Durofyne blanket... see how it pays off for *you* in clear, precise reproduction, *more profitable press time*.

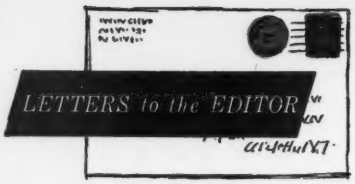
Another

REEVES VULCAN

RUBBER PRODUCT

REEVES BROTHERS, INC.

1071 Avenue of the Americas • New York 18, N. Y.



50 Books Show

Dear Sir:

Thank you very much for sending us a copy of your excellent article re current Fifty Books of the Year exhibit, which appeared in the May issue of MODERN LITHOGRAPHY.

We have put this on our bulletin board and will transfer it later to our files for the 1959 Fifty Books Show.

Richard A. Purser,
American Institute of Graphic Arts,
New York

Looking for a Job

Dear Sir:

I am a Pakistani national, 23 years old. I wish to migrate to the U. S. I have been informed by the immigration authorities at the American Embassy in London, that a visa of this type can be issued only if I can find an employer who is prepared to file a petition with the immigration/naturalization services (details available from immigration office in any large city) for my services.

I am hoping that you may be able to help me find an employer who is prepared to make this petition. I have no contacts or friends in the U. S. and any help that you may give will be greatly appreciated.

I successfully completed the three-year course in modern printing processes at the London School of Printing & Graphic Arts (Back-Hill, London E.C. 1) in July, 1958.

I am quite competent at camera operating (including masking and photo-composing techniques) and platemaking. I can also do a reasonably good job of retouching.

I am prepared to work as a camera operator in the offset or photoengraving processes or as a retoucher or platemaker in offset.

I would like to work as a research man in the technical or development department of a graphic arts supply company.

S. A. Siddiqui,
29 Amherst Ave.,
London S.W. 13, England

Readers interested in Mr. Siddiqui, or wanting to learn more about his studies and his qualifications, are urged to contact him directly at his London address.—*Editor.*

Info on Cost Accounting?

Dear Sir:

Our cost accounting system has been in practice for quite a number of years. We feel, at this time, it should be checked and revised and brought up to date.

Can you suggest any party that has experience and capabilities of serving our needs?

Andrew R. Martin,
I. S. Berlin Press,
Chicago

Suggest you contact Frank R. Turner, Jr., at NAPL, 317 W. 45th St., New York 36, N. Y. or Robert Eger, at LPNA, 1025 Connecticut Ave., N.W., Washington 6, D. C. Either of these organizations are eminently qualified to help you. If their schedules do not permit, however, I am sure they will be happy to recommend a consultant who is familiar with our industry and its particular problems in this regard.—*Editor.*

Likes Letterpress Article

Dear Sir:

We are very interested in the article by John W. Rockefeller, Jr., entitled "What Will Be the Successor to Flatbed Letterpress?" (March ML).

We would very much like to know whether it would be possible to obtain your permission and if so, on what terms, to reproduce all, or part, of this article in our offset sales promotion.

V. W. Ashby,
Manton Brothers Ltd.,
Toronto, Canada

Permission granted, provided credit is given author and ML.—*Editor.*

Thanks from LTF

Dear Sir:

Our board of directors passed a resolution at our annual meeting officially ex-

(*Continued on Page* 145)

Meetings

National Association of Litho Clubs, 14th annual convention, Leamington Hotel, Minneapolis, June 11-13, 1959.

9th Annual Southwest Litho Clinic, Dallas, June 19-21, 1959.

Technical Association of the Graphic Arts, annual convention, Hotel Manger, Rochester, June 15-17, 1959.

International Association of the Printing House Craftsmen, Statler Hotel, New York, Sept. 5-9.

Printing Industry of America, 73rd annual convention, Waldorf-Astoria Hotel, New York, Sept. 6-10, 1959.

Label Mfgrs. Association, Park Sheraton Hotel, New York, Sept. 6-12.

7th Educational Graphic Arts Exposition, Coliseum, New York, Sept. 6-12, 1959.

National Metal Decorators Association, 25th annual convention, Roosevelt Hotel, New Orleans, Oct. 12-14, 1959.

National Association of Photo-Lithographers, annual convention and exhibit, Hotel Muehlebach, Kansas City, Mo., Nov. 18-21, 1959.

Printed Offset on Atlantic Offset • Regular Finish • Basis 80

PRIDE IS A LION. The sight of a small boy pulling a ferocious tail. The satisfaction of putting a smile on a grandson's face. Pride. The joy of things more than well done. A reason proud printers turn often to Atlantic fine papers.

EASTERN Atlantic Members EXCELLENCE IN FINE PAPERS

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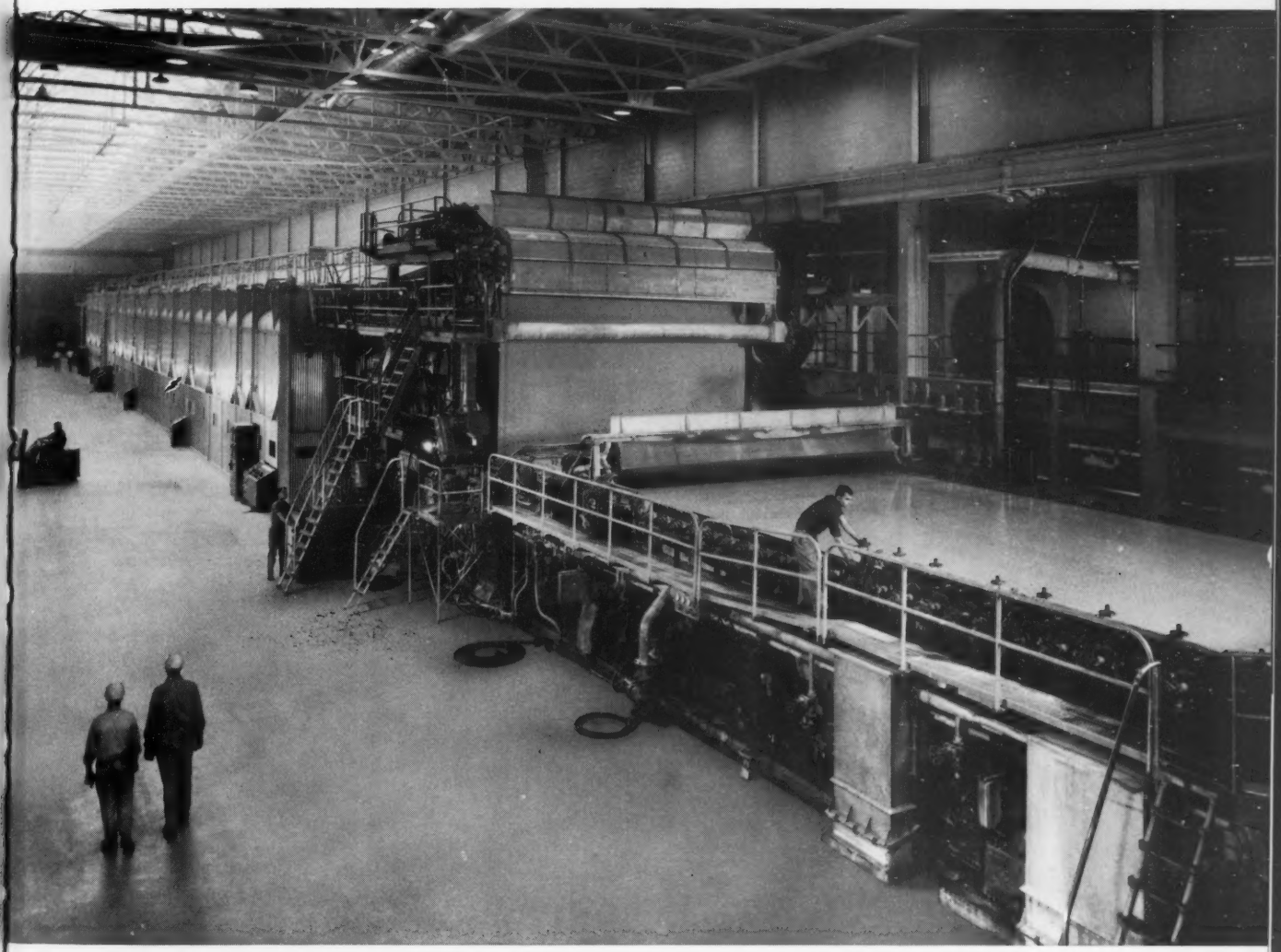
Atlantic

EASTERN FINE PAPER AND PULP DIVISION · STANDARD PACKAGING CORPORATION · BANGOR, MAINE

Champion's **NO. 20**—*world's largest fine paper machine—steps up production of the grades our customers want*

SETTING THE PACE IN PAPERMAKING . . .



Last month, the world's largest machine for the manufacture of fine paper went into full-scale production at Champion's Canton (N.C.) mill. Its tremendous output will enable Champion to serve its customers more efficiently with the paper they want—exactly when and where they want it.

This king-sized papermaker can turn out a 20-foot-wide web of paper, 545 miles long, every 24 hours. It is the most recent example of Champion's modern facilities. Eight years in the planning, No. 20 is an investment that reflects the confidence of Champion in the growth of American business and industry.

THE CHAMPION PAPER AND FIBRE COMPANY

HAMILTON, OHIO • MILLS AT HAMILTON, OHIO; CANTON, N. C.; AND PASADENA, TEXAS

Brevities

ANN JEFFREYS, of National Publishing Company, is the first woman member of the Washington Printing Guild.

•

WALTER CONWAY & ASSOCIATES have installed the first Photon photocomposition machine in the Washington, D. C. area.

LYMAN A. HENDERSON, 69, president of the lithographing firm of Davis and Henderson, died April 19.

•

JAMES D. BLIGH of Barton, Duer & Koch, Inc., has been reelected as a director of the National Paper Trade Association.

•

HOWARD J. FARLING has been appointed sales representative in the Chicago office of Cullom and Ghertner Co., Nashville, Tenn.

West Va. Co. Direct Sales Service

West Virginia Pulp & Paper Co. has introduced an expanded direct sales service to large buyers of printing papers in the Chicago area. The service was announced to representatives of printing and lithographing companies, mail order firms and 50 other businesses, at a reception there, May 14.

David L. Luke III, executive vice president, explained that the company's efforts to extend the benefits of direct selling to more printing paper buyers in Chicago has been motivated by the rapid growth of the printing industry there. Over the past ten years, he said, printers have shown a growth of nearly 75 percent in dollar volume, which is far above the national average. Chicago establishments, he added, now consume nearly one million tons of printing paper annually, or about 13 percent of the total U. S. production, excluding newsprint.

This program of extending direct sales in areas of growth is a part of a new pattern of distribution, Mr. Luke pointed out. The company will extend this program to other geographical areas which show growth potential in the commercial printing paper field, he said.

Among litho firms represented at the reception were R. R. Donnelley & Sons Co., Edwards & Deutsch Lithograph Co., I. S. Berlin Press, Photopress, Inc., Manz Corp., Harvester Press, Fort Dearborn Lithograph Co., Wallace Press and U. S. Printing & Lithograph Co.

West Virginia recently opened a new sales office in Detroit. This enables commercial printing paper users there to also buy directly from the company's mills for the first time. The office, which serves the Detroit and Toledo, Ohio, areas, handles a full line of coated and uncoated letterpress and offset grades, as well as bonds, index and postcard stock.

•

John S. Swift Dies

John S. Swift, 66 died May 18, of a heart attack at his home, 29 Brentmoor Park, Clayton, Mo. He was the founder and board chairman of John S. Swift Co., lithographers, Clayton.

HALOID XEROX INTRODUCES

a new and complete line of Halolith* materials for every graphic arts need!

This superb, new line of Halolith films and papers is furnished in a wide variety of bases to accommodate *every* graphic arts need. All new bases and emulsions are used in this series. Each was exhaustively field-tested under actual shop conditions prior to its introduction. Available in all cut sheet and roll sizes, Halolith products match or exceed the best on the market today.

A *free* demonstration of any of the materials in the Halolith series is available at *your* convenience . . . with your own equipment.

HALOLITH ORTHOCHROMATIC MATERIALS

- **Halolith Film Standard:** A film on a .0054" base. This film is ideal for general purpose line and half-tone work.
- **Halolith Film Thin:** A top-quality film on a .0034" base, designed for both line and half-tone work, lateral image reversal, overlays and strip-ins.
- **Halolith Poly-S Film Standard:** An excellent film on a clear, .0054" polystyrene base for use where a high degree of dimensional stability is required.
- **Halolith Transaloid®:** A translucent medium giving results comparable to acetate film but with significant price advantages.
- **Halolith Paper A:** Excellent for reproducing from colored, faded, or stained copy. Coated on 16 pound document base paper.
- **Halolith Paper B:** For line negatives and positives and for use with colored or stained copy. This is coated on 25 pound baryta coated photo-base paper.
- **Halolith Stripping Transaloid:** A translucent medium used for stripping. Results compare favorably with more expensive acetate films. It has a .0012" permanent support base laminated to Halolith Transaloid temporary base.

*A trademark of Haloid Xerox Inc.

FOR FURTHER INFORMATION, WRITE:
HALOID XEROX INC., 59-454 Haloid St., Rochester 3, N. Y.
BRANCH OFFICES IN ALL PRINCIPAL U. S. CITIES.

HALOID XEROX®

The strength of the tree lies in the yield of it's fruit.

Our solidarity began with an idea, after much nourishing and skill we developed a product that has proven to be the best known to our industry.

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If you'd like to know how you can realize savings like these—and bring new efficiency into your plant—write us, or call your Davidson distributor, for full information about the many Dual-Lith models. Dual-Lith, you know, is the perfect "first step" if you're thinking about converting any or all of your operations to offset! Davidson Corporation, Subsidiary of Mergenthaler Linotype Company, 29 Ryerson St., Brooklyn 5, N. Y.

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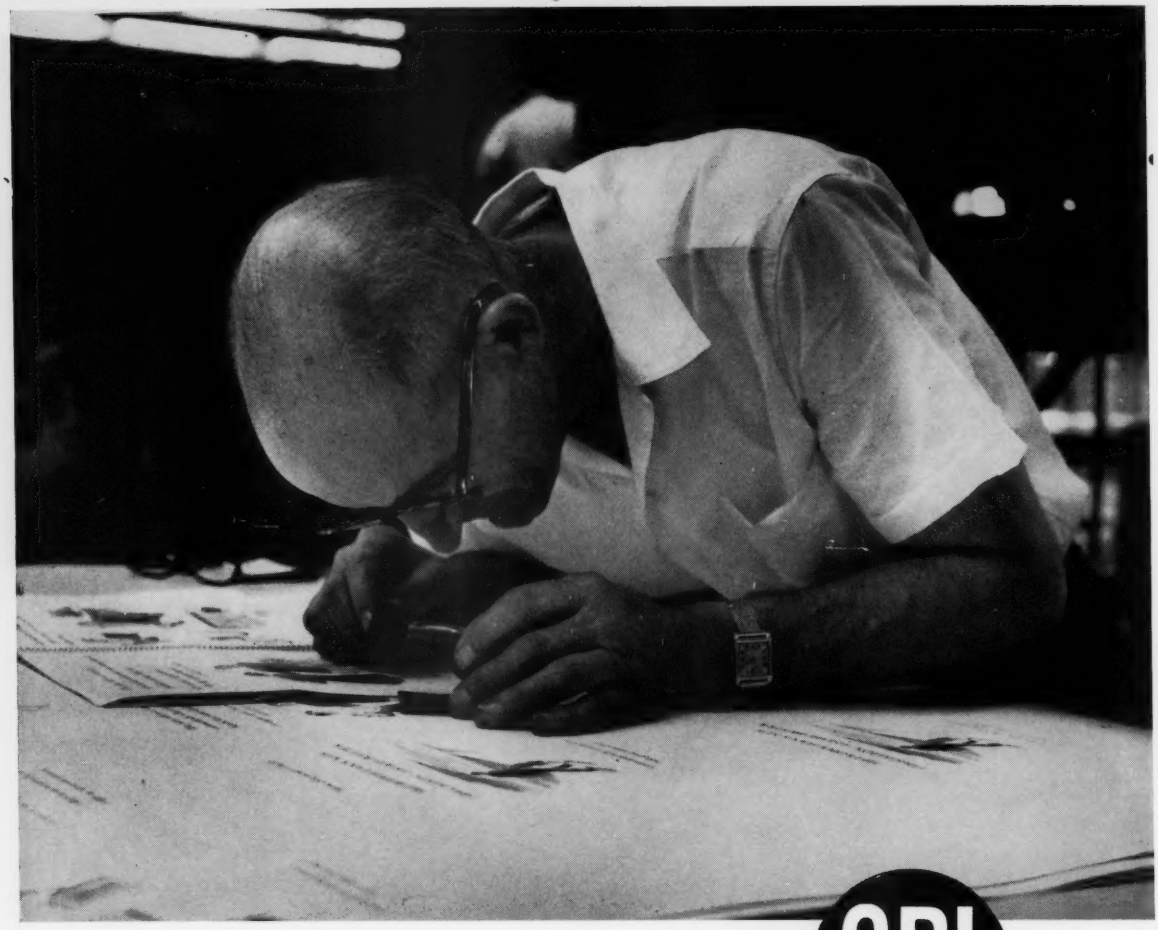

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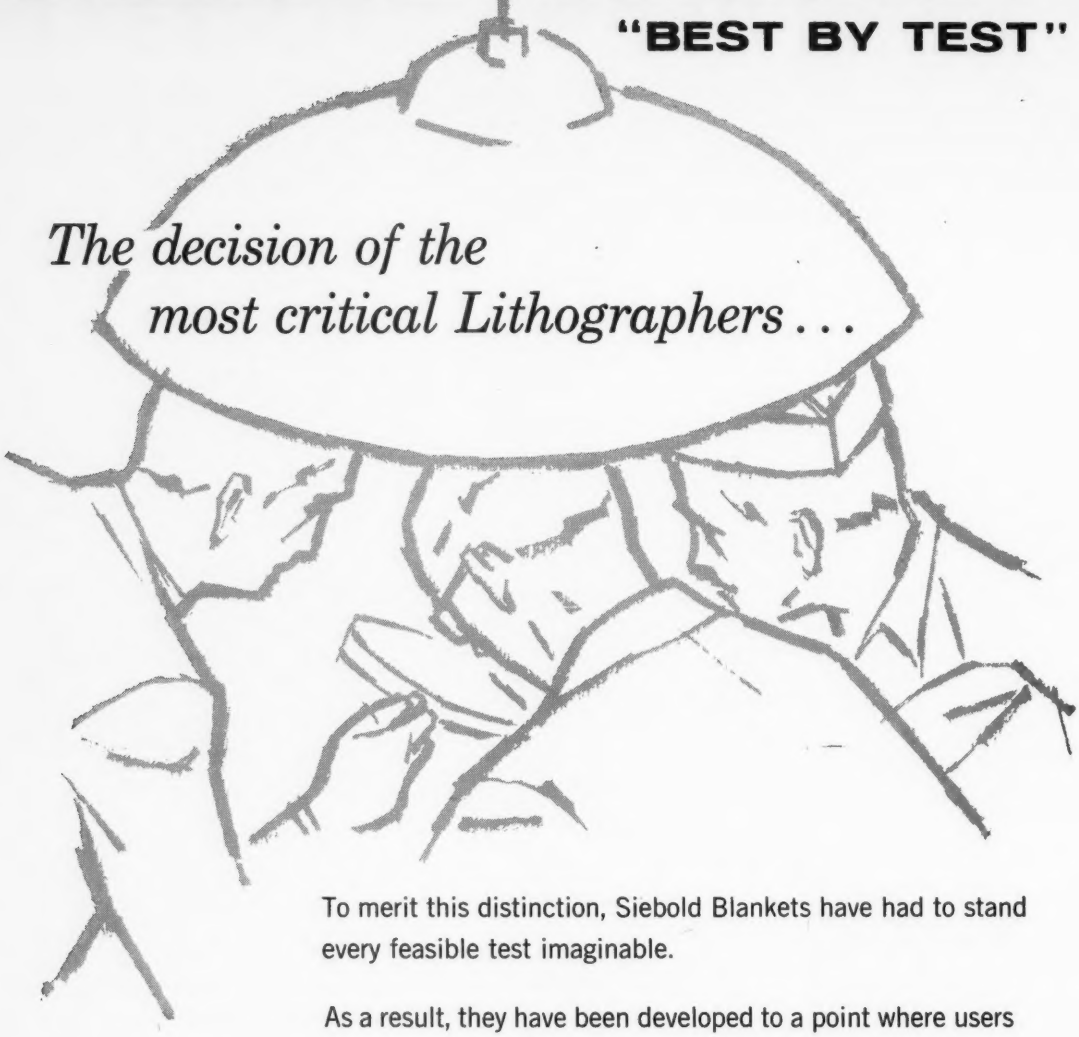

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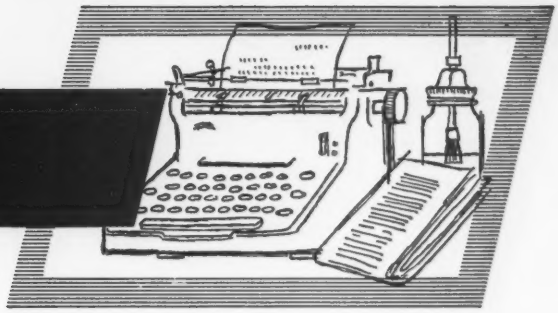
EDITORIALS



Business Forecast: Fair and Warmer

FINAL figures on business activity have been gathered, analyzed and published by those indefatigable statistics hounds at the U.S. Department of Commerce. The Printing and Publishing Industries Division of the Business and Defense Services Administration has issued an economic summary for 1958 which confirms what everyone in the graphic arts already knew all too well — "profits were down sharply." Not everyone may have known, however, that "for the group as a whole, activity in 1958 was close to the 1957 level. Employment patterns within the group were varied but higher weekly earnings were reported for all industries."

But, if the report tended to solidify the widely held notion that all was not well in 1958, at least so far as profits are concerned, it at least gave support to the still tentative hopes of lithographers and printers in most areas that things will be a lot better when the books are closed on 1959.

". . . Economic activity has continued to expand," says the report, "and businessmen expect good-sized sales increases over 1958. Realization of these expectations should be particularly helpful to the printing and publishing industries."

Picking over the rows and rows of figures with the hope of finding something of comfort to the lithographic industry, ML learned that employment was up 6.7 percent in December, 1958, from a year earlier. Commercial Printing (letterpress and gravure), on the other hand, showed a 5.1 percent drop in employment. Best records for the year were made by direct-mail and book publishing.

Looking to the future, we wonder whether, even if sales pick up in lithography this year, profits will be any better? The Department of Commerce can offer no help on this question, because it is not in the scope of its activities. It will be up to the individual shops to learn their true costs, plan their operations efficiently and have the courage to charge realistic prices for their work. Otherwise, no matter how much volume increases, profits will continue to linger in the anemic area of 3.5 percent.

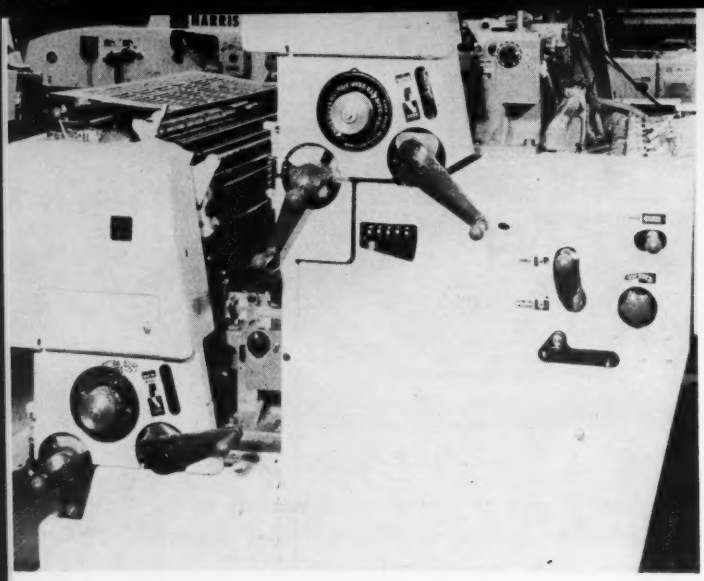
Have Convention, Will Travel

CONSCIENTIOUS members of the graphic arts industry, and members of the trade press, barely have time to unpack their bags at this time of year when they are off again to another convention, seminar, forum, show or conference. Weary conventioneers feel something like that old travelogue man, Burton Holmes, except that the only

(*Continued on Page* 137)

Quote of the Month:

". . . *The measure of an industry is not how it behaves in periods of prosperity, in periods of high volume, in periods of the easy sale, but rather, how it meets the crisis of adversity, the crisis of shrinking volume, the crisis of poor business. How did our industry react when volume dropped last year? . . . The cold facts of the matter are that lowering the price became the substitute for intensified and creative selling efforts.* — L. E. Oswald, president of LPNA, at annual convention of the association.



View of the Dahlgren Dampening System

What is the

Dahlgren Dampener?

By *Harold W. Gegenheimer*
William Gegenheimer Co., Inc.

THE Dahlgren Dampening System has been billed as "revolutionary." "Revolutionary" is a big word. So many different concepts have been tried in dampening over the years that it is difficult to say any single idea is new, without running into a controversy. I leave it up to lithographers to decide how new, or how revolutionary the Dahlgren system is.

But before we get into diagrams and explanations and such, let's ask, "Why the name Dahlgren?" Hal Dahlgren is a young man who makes his home in Dallas. During his career he has been an offset pressman, a press serviceman and a press salesman.

Hal knows the problems of lithography from the practical side. Accordingly, he dedicated himself to doing something about them. I think you will agree that he has obtained some very interesting results.

In describing the Dahlgren system, I am acting in the role of a reporter. I won't give opinions, but will simply report on what I have seen, and what I have been told by Hal Dahlgren himself, the people associated with him, and the people who have used his system of dampening.

Conventional System

First, let us review a conventional dampening system—or the kind being used on most litho presses. *Figure 1* shows a typical printing section of an offset press which consists of the plate, blanket and impression cylinders, the ink fountain and ink form rollers, and a dampener unit *(Figure 2)*.

This unit comprises a metal fountain roller No. 11 for feeding water by means of a cloth covered ductor No. 10 to a metal vibrator No. 9 and thence to the plate, via one or two paper- or cloth-covered dampener rollers, No. 7 and No. 8.

Water In Ink System

Dahlgren started his dampener development work about five years ago, and tried many different constructions with varying degrees of success. Eventually, he decided to explore the well known and quite old principle of *feeding water to the inking system.*

Harold Gegenheimer, widely known and highly respected graphic arts leader, is well qualified to report on the Dahlgren unit. With his father, William, he has helped make several important improvements in dampening equipment, including water levels and water stops, which are standard equipment on many offset presses. He is vice president of the company which his father heads, and is often called upon to address litho club and other meetings on the subject of new products in the litho industry.

Results were not encouraging at first. But in 1957, some basic improvements were made by Dahlgren for the first of two steps in what might be a "breakthrough" in dampening. *(Figure 3.)* For economic reasons the standard arrangement of fountain, ductor and vibrator rollers was adopted. This portion of the dampener was exactly the same as supplied by the press manufacturer.

The obvious difference with the entire system is that the water goes from the metal vibrator roller, to a sponge-rubber roller, No. 13, which accepts water readily and acts as a storage reservoir. The water travels to a specially plated metal, and completely water-receptive roller, No. 12, to the soft rubber ink form roller, No. 1, which carries the water to the plate. Both rollers — No. 12, the metal roller and No. 13, the sponge-rubber roller — run as idlers. Neither one is gear driven. Adjustments are simple and only normal accuracy of the settings is required. The cloth- or paper-covered rollers are eliminated.

Big Testing Program

The system I have described is the one now in daily operation on 30 presses, single and two-color, in 12 plants. Two units are also installed on a 22 x 34" two-color press at the Lithographic Technical Foundation laboratory in Chicago. I have seen some of these units in operation and they are doing regular commercial work which is being sold.

As a reporter, I asked about the

From a talk given at the Carnegie Institute of Technology alumni seminar in training management, Pittsburgh, April 18.

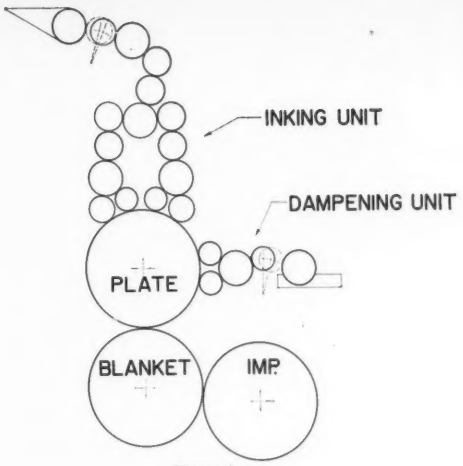


Figure 1

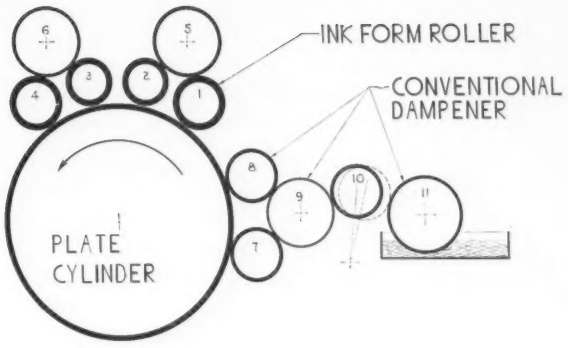


Figure 2

advantages of the system — the kind of advantages that could mean increased production and better quality.

This is what I was told:

1. No dampener roller contact with the plate means the following:
   a) Less lint transfer and fewer hickies.
   b) Dampener rollers do not have to be changed when changing colors.
   c) Dampener rollers do not build up ink in solid areas.
   d) Presensitized plates seem to run longer.
2. Because dampening is improved, up to 50 percent less water is required. This means that:
   a) It is possible to print with letterpress enamel paper stock.
   b) Better color is obtained.
   c) There is less emulsification of the ink.
   d) Better register is possible all over the sheet.
   e) Drying is faster.
   f) Offset is reduced.
3. Because a balance between ink and water is obtained rapidly,
   a) jobs are started faster.
   b) there are fewer waste sheets.
4. Special inks are not required.

No Absorbent Rollers

With all these advantages in his favor, the average inventor would call it a job well done and be happy. But Hal Dahlgren had other ideas — he was aiming at a dampener unit with no water-absorbent rollers, because he feels that they are the chief cause of inconsistent feeding of water.

Second Step

The second, and really startling of his two steps for dampener improvement, appears to be the last word in simplicity. It was first tried about five months ago. *(Figure 4.)*

Roller No. 12, is the same as before. It is the specially plated, completely water-receptive metal roller. Roller No. 14 is new. It is made of a soft rubber which is not water-absorbent. It runs in a pan of water and is geared to No. 12, so that both rollers run at the same surface speed. These two rollers are driven, independently of the press, by a ¼ H.P., variable speed motor, electrically controlled

(Continued on Page 143)

Figure 3

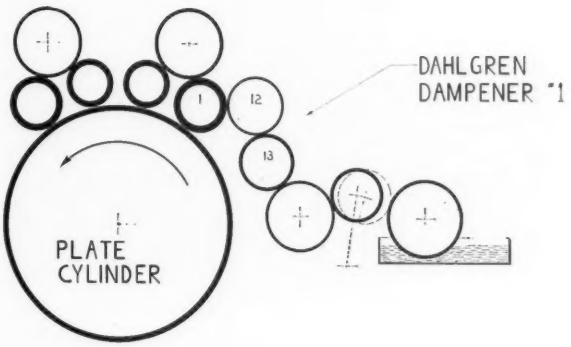
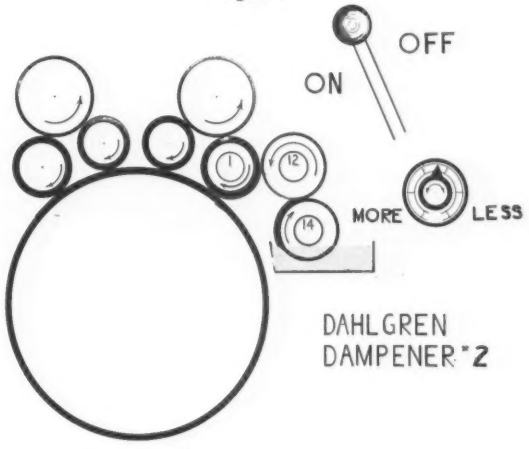


Figure 4



Web Offset

Part VI: Survey of Web-Offset Presses (Conclusion)

By *John B. Scouller*
Camden, Ark.

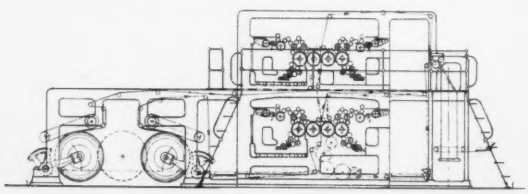
MILLIONS of feet of paper have passed through web-offset presses since the days of the early Vomags, and since the early experiments of Harris Webendorfer which culminated in a practical design. But more important is the bright, expanding future which has been predicted for web-offset. E. G. Ryan, who has spent 25 years selling web-offset presses, has said, "we've barely scratched the surface in the web-offset business. This field is in about the same relative position as sheet-fed offset was 25 years ago."

During the past few years the web-offset press has gone beyond the business forms and specialty fields and has entered the high-quality publication field and the newspaper business. In addition, smaller units are being used for commercial work of all kinds.

This expansion and growth has been reflected in the number of new web-offset presses and manufacturers that have entered the scene. The following list is provided so that the lithographer who has become interested in the web-offset field can obtain additional information.

Acme Machinery Division
Acme Litho Plate Graining, Inc.
34 West Houston St.
New York 12

The Acme Machinery Division sells the Milton press. It is manufactured in East Germany by Polygraph. This is an open design press having a 17⅜" cutoff and a 24½" maximum web width, available in two to six

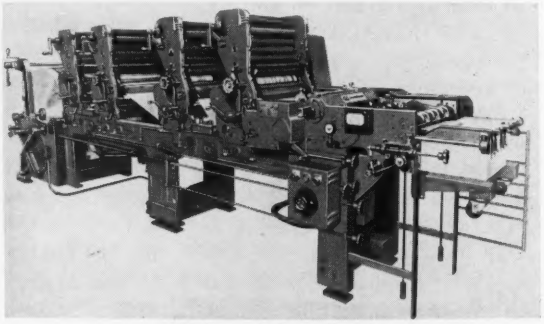


units. It is well suited for newspaper and general commercial printing. Imprinting units, roll-away type folders, and other attachments are available.

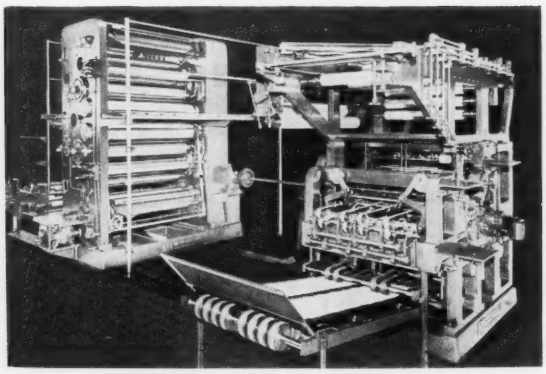
The Acme Machinery Division also imports the German Plamag which was formerly called the Vomag. The drawing shows the Plamag Messamt. This press has a 34" cylinder circumference and takes a 22" web. It produces the standard 8½ x 11" signature. Or, with the third fold attachment it will produce a 5½ x 8½" signature. The folder will produce either collect or non-collect products. The webbing is such that in addition to the normal web-color arrangements, the press can also print one color on one side of the web and three colors on the reverse side. This is accomplished by printing one of the colors by direct lithography. One or two lithographers have converted their American built presses to do this also.

American Type Founders
Web-Fed Division
200 Elmora Ave.
Elizabeth, N. J.

ATF offers a line of publication presses, business forms presses and color or job presses. The publication presses are 22¾ x 35", 35 (34.95) x 49", 23½ x 38" and 41⅝ x69". The business forms presses take a 26½" web



ATF Four-unit Green Hornet



ATF 35 x 49" Publication Press

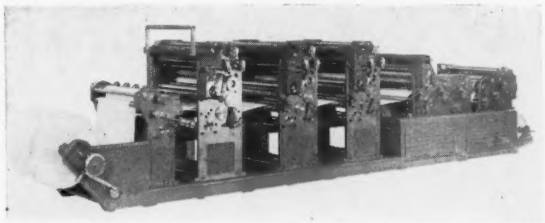
and come in two different cylinder circumferences: 17" and 22".

The color presses are custom built with the exception

of the Green Hornet line. This press has a 11½" cylinder and takes a 17½" web. It comes as a two- or four-unit press. ATF also builds custom designed presses.

Ashton Press Mfg. Co., Ltd.
60 Beech St.
Ottawa 1, Ontario

Ashton Press Mfg. Co. builds "Continuous Flow" business forms presses and equipment for the business forms industry. These presses are of unit construction to permit custom design. The printing units are both dry and wet offset as well as rubber. Imprinting, numbering, punching, folding, perforating and rewinding, units are also incorporated in these presses. Standard sizes of continuous forms units include cylinder circumferences

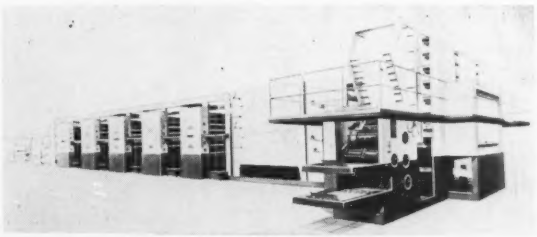


of 14, 17, 22, 24, 26 and 28" and standard web widths of 14, 20, 26 and 32". Press shown in photo has a 17" cylinder with a 26" web width and is rated at 700 feet per minute.

The Cottrell Company
A Subsidiary of Harris-Intertype Corp.
Westerly, R. I.

The Harris-Cottrell organization offers two standard size blanket-to-blanket publication presses and one publication press of the split or modified impression cylinder design.

The blanket-to-blanket presses are 22¾" cylinder



Five unit Blanket-to-Blanket Press

Four-Color 43 x 50" LGC Press

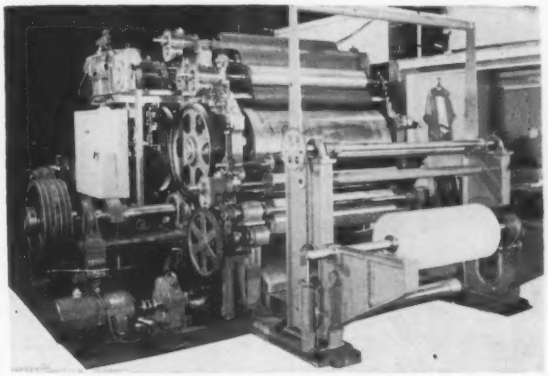
circumference x 38", and 35" cylinder circumference x 50". The modified impression cylinder press is called the LGC and has a 43" cylinder circumference and a 50" web. The company also builds custom presses.

R. W. Crabtree & Sons (Canada) Ltd.
629 Adelaide St., West
Toronto 3, Ontario

R. W. Crabtree builds custom designed web-offset presses. These presses are blanket-to-blanket or of the common impression cylinder design, as the requirements of the customer indicate.

Dilts Division
The Black-Clawson Co., Inc.
Fulton, N. Y.

The Dilts Division of the Black Clawson Co. makes a line of Pacemaker presses designed for printing dress patterns, labels, maps, fruit wraps, etc. It will print .001"

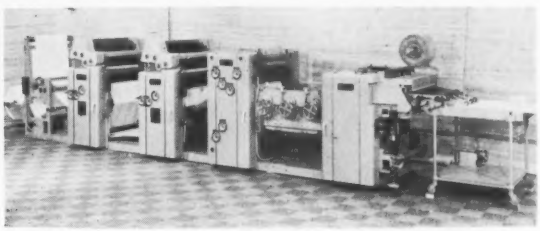


tissue at a speed of 1,000 feet per minute. Model 585 is the basic press. Its plate cylinder measures 52" across and 94¼" around.

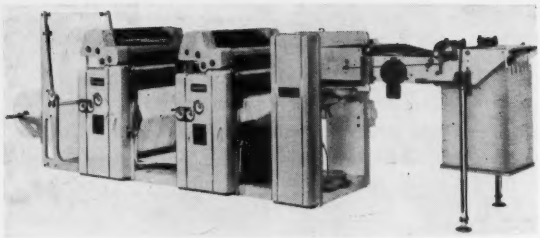
Model 440 is designed for printing on both sides of the sheet as a perfector or as a two-color press. Or, one unit can be run while the second unit is made ready, for continuous operation. Model 450 can be used for two-color work or it can be used as a single color press. In the latter case, one section of the press is made ready while the second section is printing. When this second section has completed its run, it is cut out of production and the first section is brought into contact with the common impression cylinder. The second section then is made ready to repeat the cycle.

Orville Dutro & Son, Inc.
117 West 9th St.
Los Angeles 15

Orville Dutro sells web-offset business forms presses. They have a 13" web by 16 and 17" cylinder circumferences; 26" web width by 17, 21 and 22" cylinder circumferences. The presses are equipped with electric



Dutro 17 x 26" Two-Color Business Forms Press



Dutro 17½ x 26" Two-Color Journeyman

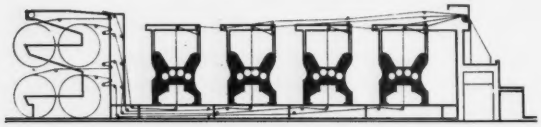
eye devices to control punching; also attachments for imprinting, numbering, glueing, slitting, attaching carbon, etc.

Also featured is the new Journeyman line. These presses are designed for commercial printing. They come in either 13 or 26" web widths and 17 and 17½" cylinder circumference. They are equipped with sheeters.

The Western Gear Works builds these presses.

The Goss Printing Press Co.
5601 W. 31st St.
Chicago 50

The Goss Co. is in the process of building a blanket-to-blanket press designed for newspaper production, called the Goss Suburban. It has a 22¾" cut off and will take a 36" web. Units can be arranged either in tandem

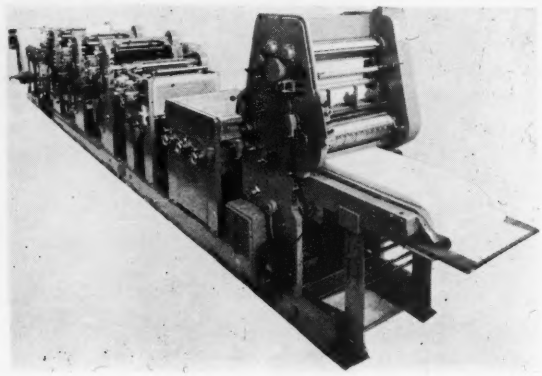


on one level or stacked two high. Stacked units permit better color register and reduce overall length of the press. It has a newspaper type folder which can be equipped with a quarter-fold attachment for the production of closed head magazines.

The press may be arranged to print either eight pages two-color or 16 pages in black.

The Hamilton Tool Co.
Hamilton, O.

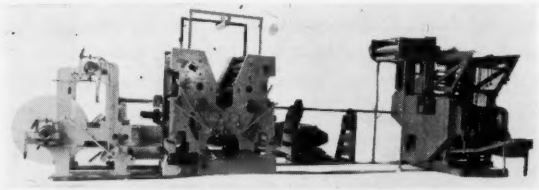
A wide variety of custom web-offset presses is built by this company. These are designed chiefly for the business forms industry, but several models are well suited for general commercial printing and speciality



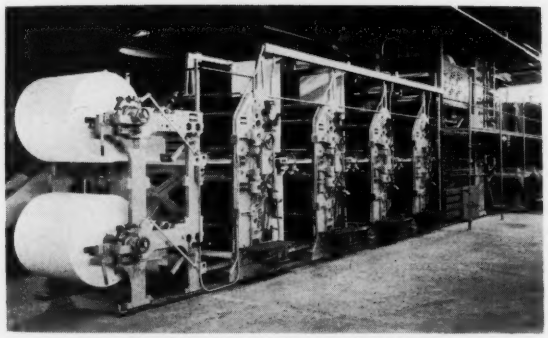
work. Cylinder circumference is in the 17" range, while distance between bearers can be specified at 15, 18, 22, 26" or wider. Collators, rewinders, and other specialized equipment required by forms printers are also provided.

George Hantscho Co., Inc.
602 South 3rd Ave.
Mount Vernon, N. Y.

George Hantscho Co. makes two standard publication presses: 22¾" cylinder circumference, 36" web; and 35" cylinder circumference, 50" web. These are blanket-



Hantscho Telephone Book Press



Four-Color Hantscho Press with Folders

to-blanket presses. The photo shows a four unit 22¾" press with two folders.

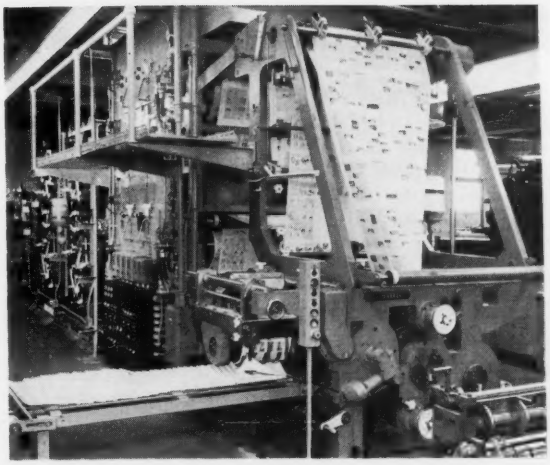
A second line is also featured. These presses are called Junior Webs and are designed for offset newspapers. These also have a 22¾" cylinder circumference and come in 18 and 36" web widths. Either a folder or a rewinder can be attached. A collator is offered if the rewinder is used. Custom designed and built presses also are offered. The one in the photo is a telephone book press. It has a 38.484" cylinder circumference, a 26" web for the production of 9⅝ x 13" signatures.

D. L. Harris Co.
835 Fidelity Union Life Building
Dallas, Tex.

The Harris Pacemaker presses are unique. Plate cylinders can be removed and cylinders of different circumference installed. Dry and wet offset plates and rubber can be used. Models D, E and F are business forms presses. Model C is a press for commercial work.

Hess and Barker Co.
930 Washington Ave.
Philadelphia 47

Hess and Barker Co. specializes in web-fed printing presses. Publication presses are blanket-to-blanket perfecting, in sizes 22¾ x 36½", 23½ x 38½", 35 x 38½",

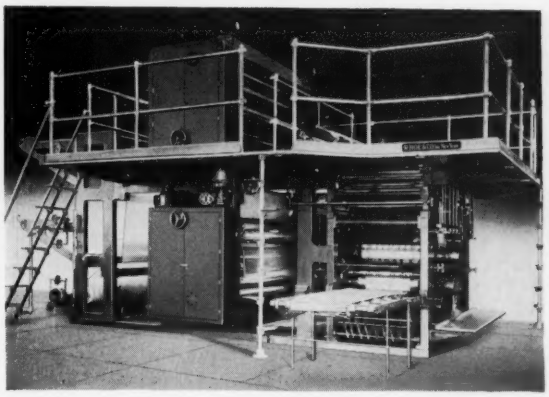


and 35 x 50″.

The company also manufactures custom web-offset presses having either the blanket-to-blanket, unit type, or drum construction.

R. Hoe and Co., Inc.
910 East 138th St.
New York 54

Custom designed presses in web widths from approximately 48 to 70″ and cut-offs from 42½ to 57″ are manufactured by Hoe. These presses are being used for



telephone books, encyclopedias, etc. The Hoe Jobber is no longer being made.

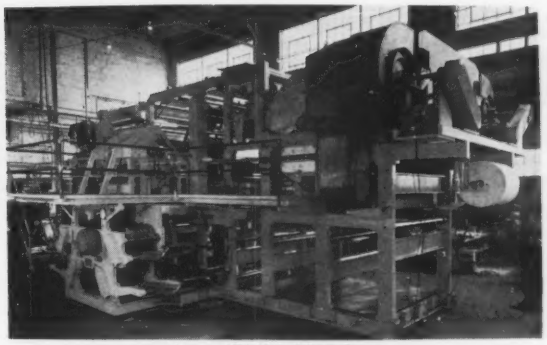
Photo shows the Hoe Directory press. It has a cylinder circumference of 57″ and a maximum web width of 68¼″, and produces an untrimmed signature of 9½ x 11⅜″.

Kidder Press Co., Inc.
121 Broadway
Dover, N. H.

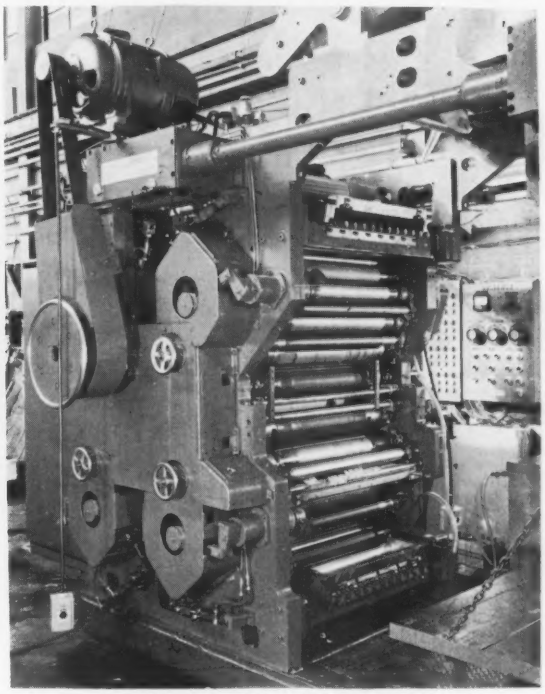
Kidder builds web-offset presses to designs which are the property of its customers. There are several organizations which build web-offset presses on this basis and no attempt has been made to list them all here.

Fred'k H. Levey Co., Inc.
Printing Ink and Machinery Division
Columbian Carbon Co.
4901 Grays Ave.
Philadelphia 43

Levey builds custom designed presses of the common impression cylinder type. The company also builds driers for these presses, sells a line of ink for web-offset and sells the Aller bi-metal plate. Top photo shows a Levey



Levey 47" Web-Offset Press



Levey Dress Pattern Envelope Press

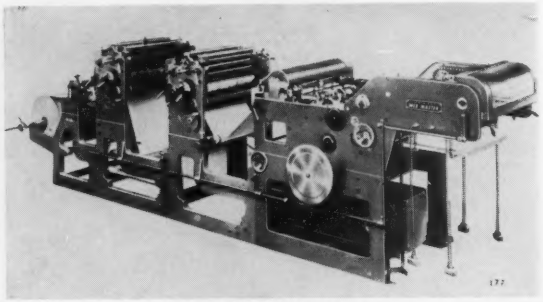
press with a 47″ cylinder circumference which will double end a 40″ web. It prints four colors on both sides of the web. It is unusual since it has two cut-offs: One is ⅓ of the cylinder circumference--15⅔″—for the production of 5½ x 15⅔″ signatures; the other is ¼ of the circumference—11¾″. This is for a signature 8⅝ x 11¾″. The press is rated at 1,500 fpm.

The second photo is of a smaller press. This press is used to print dress pattern envelopes, four colors on one

side of the web, and then rewind the web for later converting. Presses which will print a 71″ web, five colors both sides, have also been built.

Printing Material Corp.
350 Hudson St.
New York 14

Printing Material Corp. is a new organization headed by Martin A. Ross. The company is the American agent for foreign equipment. The PMC web-offset press is called the "Web-Master." It is of open construction,



Two-Unit "Web-Master"

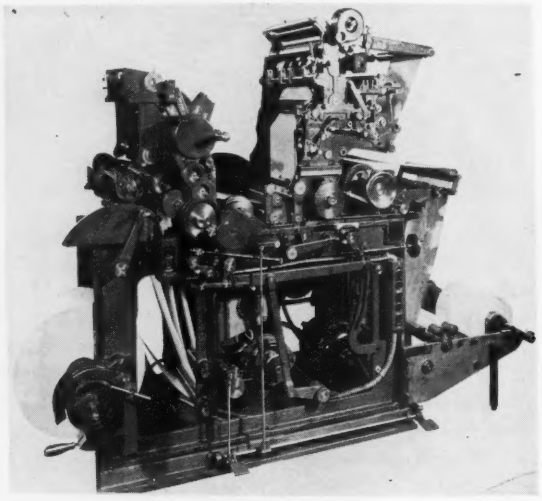
17⅜″ cylinder circumference, 24⅜″ web width. It is available in from one to eight units and can be equipped with sheeter, folder or rewinder, or all three because the folder is of the swingout design.

The press is available in two or four colors and is designed with a built in collecting selector which gathers up to eight sheets at one time then delivers.

E. G. Ryan & Co.
153 West Huron St.
Chicago 10

Offset Press Mfg. Co., Ltd.
15 Alcorn Ave.
Toronto 5, Ontario

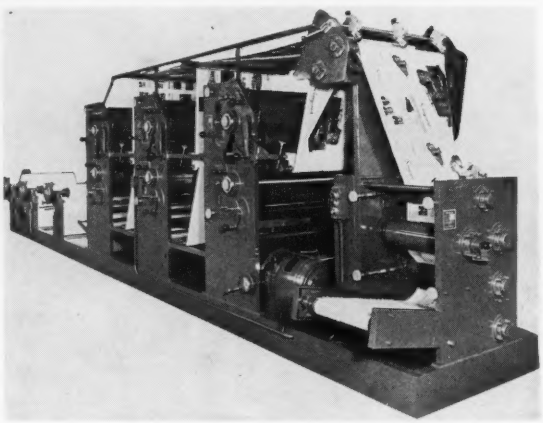
The E. G. Ryan & Co. is the sales agent for the OPM Jobber built by Offset Press Mfg. Co., Ltd. of Canada. The OPM is a two-unit press with a rubber



imprinter. It is designed for business forms and as a jobber. The standard press has a 8½″ cylinder circumference and a 14½″ web width. Numbering, punching and rewinding equipment are optional. Other size OPM presses are available.

Vanguard Sales and Service
An Associate of Orville Dutro & Son, Inc.
211 North Ervay St.
Dallas 1, Texas

The Vanguard (formerly the Gemco) is a blanket-to-blanket press designed by a newspaper publisher for the



production of small daily and weekly newspapers. It has a cylinder circumference of 22½″ and comes in two sizes: 31″ max. web or 36″ max. web width. It is equipped with a newspaper type former folder. All the roll stands are on the floor to make roll handling easier. The press can be provided with normal blankets or with blanket cylinders having the rubber blanket vulcanized to the cylinder. The presses are built in one, two, three, or four perfecting units. The press is built by Ghormley Engineering Corp., Fort Worth, Tex.

John Waldron Corp.
P.O. Box 791
New Brunswick, N. J.

This company makes an open press which is suitable for commercial work and tabloid newspapers. It can

(*Continued on Page* 141)

REPRINTS

Numerous requests for reprints of this series already have been received by ML. Those who are interested (whether suppliers or lithographers) in a complete reprint, including all charts and photos, at $1.50 *a copy, or* 50 *cents each for* 100 *or more, should send orders, with checks, to* "Web-Offset", c/o Modern Lithography, Box 31, Caldwell, N. J.

NALC To Twin Cities

IT SEEMS hardly possible that this year's convention of the National Association of Litho Clubs will be the 14th, but that's what the program says for the Twin City gathering June 11-13. Seems only a few years back that a handful of litho clubbers from several East Coast cities were making tentative plans to organize themselves on an inter-city basis.

If conventions of recent years are any indication, the meeting at the Leamington Hotel will be crowded with lithographers and their wives from all sections of the country.

A colorful mailing campaign featuring the slogan "Land of the Sky Blue Waters," coupled with a busy program, should assure a big attendance. Herman Goebel, NALC president, will preside at the usual business sessions all day Friday. In addition, club members will discuss their problems on the first afternoon at a program to be moderated by Russell Waddell, educational chairman of the association.

Saturday morning will be devoted to a panel discussion of technical problems, with no fewer than 13 panelists on paper, ink, plates, press, camera and research. Edward Schmidt, L. F. Dow Co., will be moderator. Panelists include John L. Kronenberg, R. I. Nilsen, A. W. Reitz, W. Klomp, Donald Grant, Robert Wybest, Frank Ireland, James K. Martin, Edward Mitsch, Theodore Makarius, Rex Morgan, Chester Nowak and Ira Hoffman.

On the entertainment schedule are a smörgasbord, dancing, cocktail parties sponsored by suppliers, and, of course, the annual banquet.

General chairman for the convention is Barney Skomars, of the Twin City club.★

Year End Review

By *Herman C. Goebel*

President, NALC

AS WE approach the 14th annual convention of the National Association of Litho Clubs to be held in the Twin Cities June 11-13, it would be well for us to review what our organization has accomplished during the past year and to consider our plans for the future.

One important accomplishment of our organization during the past year was the publication of a needed Club Manual, available to all members of the organization and to members of the craft interested in establishing a new club. This manual will serve as a guide to a more uniform operation of litho clubs and for more impressive induction and installation ceremonies. It also furnishes suggestions for better programming and developing leadership.

At the beginning of this administration a program chairman was added to the staff of national officers and through his efforts all clubs were given the opportunity of reviewing the activities and accomplishments of every other club by receiving a copy of every club bulletin. The educational chairman also assumed the responsibility of seeing that all clubs had a complete and up-to-date file of LTF publications. For the convention he has developed a club participation program that will be of great interest and educational value. It will be a demonstration of correct club procedure in various club activities.

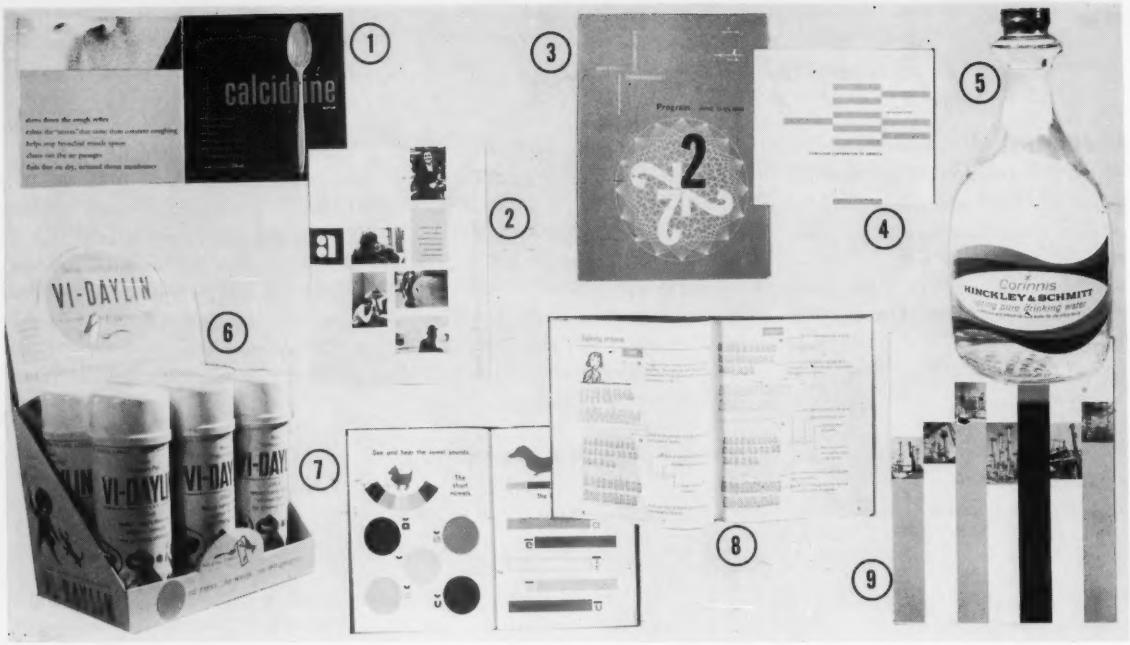
During the past year, in addition to the regular publication of an exceptionally fine Tip Sheet, a special news release covering important activities was mailed to every member of the organization. Also, through the efforts of loyal and generous members, a second edition of more than 55 thousand copies of "Meet a Litho Clubber" was published and made available to all the clubs and for distribution at the 7th Educational Graphic Arts Exposition to be held in New York, Sept. 6 to 12. At this exposition arrangements have been made for our organization to have a booth without cost.

Continuing efforts have been made to keep the NALC mailing list right up-to-date and its membership has received individual mailings of important research developments from time to time.

Realizing the need for a permanent headquarters and a permanent secretary for our organization, a committee was appointed to explore the possibilities of helping to satisfy this need and due to the efforts of this committee considerable progress has been made along this line.

At the last mid-season council meeting a new committee was appointed to develop a long range planning for NALC so that definite objectives can be established and continued intelligently as administrative personnel changes from year to year. By the end of this administration three new clubs will have received their charters in the national organization, with a healthy outlook for many more to join in our activities during 1959 and 1960.

All in all, it is the feeling of the present administration that, although we perhaps did not accomplish all that we had set out to accomplish, we have made substantial progress which was made possible by the help, understanding and cooperation of this great industry as a whole.★



Among lithographers who produced winners in the STA exhibition were (1) Magill-Weinsheimer Co. (2) Fey Publishing Co. (3) Rand McNally & Co. (4) Veritone Co. (5) Imperial Lithographic Co. (6) Ace Carton Co. and National Office Supply Co. (7) Regensteiner Corp. (8) Bookwalter Co. (9) John Dickinson Schneider Co. "Design in Chicago Printing" show was on exhibit May 2 - June 5.

Offset in Spotlight in STA Competition

LITHOGRAPHY was very much in the spotlight at the 32nd annual exhibition of "Design in Chicago Printing," which was on view at the Chicago Art Institute from May 2 to June 5, under sponsorship of the Society of Typographic Arts.

A total of 878 entries in 18 categories were submitted for judging and from these the three-man jury selected 99 as recipients of the society's Certificate of Excellence. Of these 99, 39, or nearly 40 percent, were for commercial jobs produced by lithography. This proportion becomes even larger if categories in which offset does not compete, such as newspaper and trade journal advertisements, and a third group, called "editorial design," are eliminated.

This overwhelming showing by offset prompted one judge to exclaim: "Most of the show seems to be in offset. Aren't there any good things being done letterpress?"

The winning 39 offset jobs were produced by 20 litho firms. Photopress and the Veritone Co., each did five of the honored items. Three each were credited to Rand McNally & Co., Hillison & Etten Co., Magill-Weinsheimer Co. and Huron Press. Two each were produced by H. L. Ruggles & Co., George F. McKiernan Co., and Ryder & Dickerson, while the following placed one each in the show: Regensteiner Corp., John Dickinson Schneider, Ace Carton Co., Weber Lithographing Co., R. R. Donnelley & Sons Co., Twentieth Century Press, Bruce Offset Co., Fey Pub. Co., Bookwalter Co. and Im-

(*Continued on Page* 147)

Judges King, Regehr and Katz, view design exhibit.

Lithography Wins 50% of Awards At Chicago Show

By *H. H. Slawson*
Chicago Correspondent

Facsimile of the William Morris Helmscott "Chaucer." Picture shows pages 312-313. Platemaker and lithographer was Copifyer Lithograph Corp., Cleveland.

MIDWESTERN offset printers produced 28, or nearly 50 percent, of the 59 books which won "Top Honor" awards in the 10th annual exhibit of Midwestern bookmaking sponsored by the Chicago Book Clinic.

Ten Chicago lithographers produced 14 of the 28 offset winners and six out of town firms printed the other 14. Chicago firms represented, with the number each placed in the victory column were:

Rand McNally & Co., (3); Photopress Inc., (2); American Book-Stratford Press, (2) and the following with one each: Segerdahl-Halford Printing Co.; Riley Printing Co.; Rayner Litho Co.; R. R. Donnelley & Sons Co.; Schultz Lithographing Co.; Abbott Lithographing Co.; and Veritone Co.

Out of town firms included North Central Publishing Co., St. Paul, Minn., (5); Copifyer Lithograph Corp., Cleveland, (4); Kingsport Press, Kingsport, Tenn., (2); and three with one book each to their credit — Bloomington Offset Co., Bloomington, Ill.; Wetzel Bros., Milwaukee; and Evans-Winter-Hebb, Detroit.

Covers by Offset

Covers on 13 of the 28 offset winners were printed by offset by various of the above firms and by three others, Midcity Lithographers and Admiral Offset Printing Co., Chicago; and the Lund Press, Minneapolis.

Nine Chicago winners: Top row (l.-r.)—Schultz Lithographing Co., Chicago; Wetzel Bros., Milwaukee; Copifyer Lithograph Corp., Cleveland; Veritone Co., Chicago; and R. R. Donnelley & Sons Co., Chicago. Bottom row—Copifyer; Rand McNally & Co., Chicago; (a letterpress winner); and Admiral Offset Printing Co., Chicago.

Eligible for entry in the show were all books published or produced in the Chicago-midwestern area during 1958. Judges scored each entry against a set of ideal standards and the 59 final winners represent the finest books available from the standpoint of design, reader appeal, printing and binding.

Standards covered design, readability and attractiveness, illustrations and binding.

No attempt was made to rank the books comparatively but certificates of award were presented to the publisher and designer of each Top Honor book.

There is no such thing as a "typical" book any more, asserted Eric Bender, executive of Row, Peterson & Co., Evanston, Ill., publisher. Every one of this year's 59 "Top Honor" books, he said, bears the mark of an individual, not the stamp of a machine. This is true, he said, in an examination of "trends" as indicated in the exhibit, because competent designers are being given increasing latitude and are able to make use of improved book manufacturing processes.

Simplified Design

One of the principal advances, Mr. Bender said, has been in production of attractive cover designs, in which designers have taken full advantage of the possibilities of offset, preprinted cloth and improved stamping techniques. The covers, at the same time, he pointed out, have been freed of considerable type matter. "Even the

(Continued on Page 147)

Alan S. Holliday (left), new president of R & E Council, presents plaque to outgoing president George H. Cornelius, Jr., at New York meeting.

At R & E Meeting:

Accent on Color

THE accent was on color at the 9th annual conference of the Research and Engineering Council of the Graphic Arts Industry, Inc. The group met May 18-20 at the McAlpin Hotel in New York, with 250 graphic arts producers, customers and suppliers in attendance.

The interest in color centered on a panel discussion titled "Some Colorful Ideas," held on Tuesday afternoon. In that panel four technical men talked about the elements of color, the way the eye can be deceived by color, various photographic masking systems, and the color printing situation in England.

However, color came in for considerable discussion in other talks, too. For instance, in another panel discussion on copy conception, preparation and production, the particular problems encountered in lithography, letterpress and gravure were aired by another group of speakers.

Still further attention to problems of color reproduction was paid on the final day of the meeting during one of several field trips sponsored by the Council—to the Time, Inc. laboratory at Springdale, Conn. There the well-known color scanner developed by the laboratory was on display.

Elected to head the Council for the coming year was Alan Holliday, Craftsmen Inc., who succeeds George H. Cornelius, Jr., of Cornelius Printing Co. Other officers are listed elsewhere on this page.

The first scheduled meeting of the new executive committee of the organization is set for Appleton, Wis., on June 25.

Opening the panel on color was a movie introduced by F. L. Wurzburg, Jr., of Interchemical Corp., Printing Ink Div. The film, entitled "This Is Color," explains refraction, reflection, transparency, opacity, subtractive mixtures and additive mixtures. The film was quite well received for the clever way in which it makes a highly complex subject both understandable and entertaining. (The 27-minute sound and color film is available on loan, at no cost, from the company).

New Officers of R & E Council

PRESIDENT—*Alan S. Holliday*
1ST VICE PRESIDENT—*C. L. Jewett*
2ND VICE PRESIDENT—*Paul Lyle*
SECRETARY—*C. M. Flint*
TREASURER—*J. Russell Parrish*

Frank Preucil, of LTF, followed with a discussion of trends and new problems in color reproduction. He cited many of the problems which still exist in color work, but looked to the future possibility of using one plate, and one impression, to get four-color process reproduction. He also mentioned a new screenless tint method now under investigation at the Foundation, which shows some promise of giving better color reproduction.

Mr. Preucil used color wheels to simulate halftone and continuous tone printing. He outlined the problem of whiteness in paper, and its effect on colors. A sheet with a yellowish cast often is advantageous for setting off warm tones, while a bluish sheet is good for brighter tones. Lighting conditions, of course, also have a distinct effect on the viewing of colors, he added.

Commenting on lithographic research, he observed that offset has profited by studying the techniques of letterpress and gravure. From the former, lithography has learned to use the advantages of a sharp dot on letterpress coated papers; and from the latter, the industry has made use of chrome plated copper rollers.

Karl L. Thaxton, of DuPont, focussed his attention on two types of masking: premasking, before the color separations are made, and post masking, which includes single-stage masking and "masked masking."

The final speaker on the panel, Charles Mansell, of Balding & Mansell, Ltd., told about conditions in Britain. He prefaced his remarks about color printing with a lengthy discussion of labor-management negotiations underway in his country.

The panel which aroused most interest among the technical men, who came from all parts of the country to attend the meeting, was the one on the opening day concerned with "An Idea To Copy to Reproduction."

Speakers, representing printing buyers, production men and printers and lithographers, cited their diverse individual problems in doing color work and laid the blame for poor results to many causes. They seemed in total agreement however, on one important point—the need for a group of buyers, production men and printers to seek a better working relationship and to eliminate problems before they get beyond the point of correction.

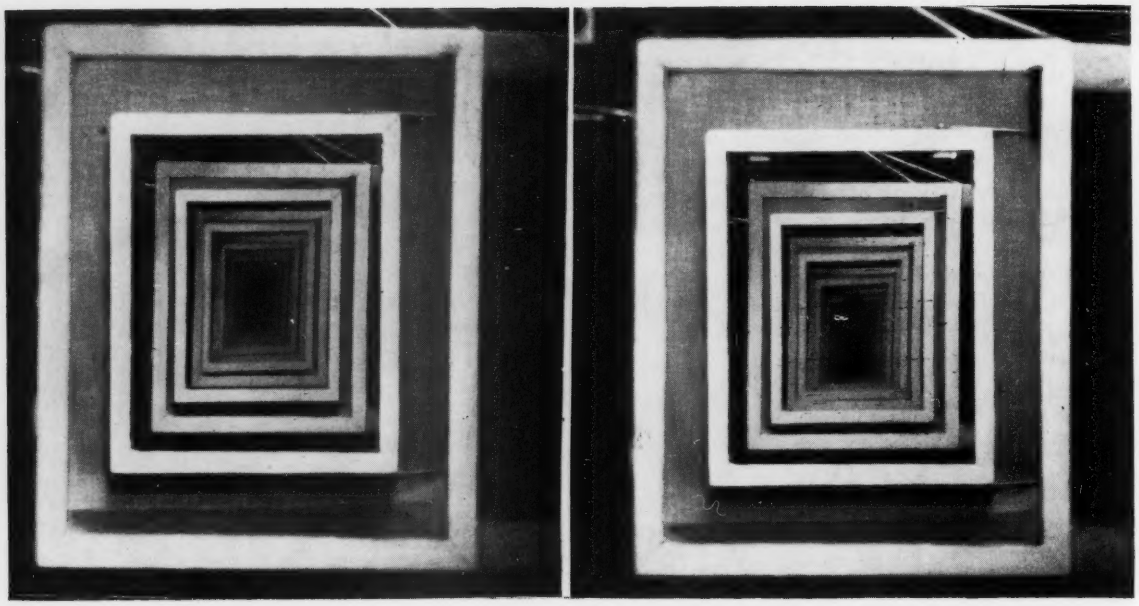
Opening day panel on "An Idea to Copy to Reproduction."

Louis A. Squitieri, of U. S. Rubber Co., was one of the strongest advocates of such a group. He suggested further that the Council might set limits on "how far art work should go before it begins to duplicate the work of the printer or lithographer." In some cases, artists have been performing jobs that are later duplicated by the printer; in others, the printer has had to do jobs which should logically be done by the artist.

Richard J. Walters, of U. S. Printing & Lithograph Co., declared that a printed product is "tailor-made," hence cooperation is essential on the part of all parties.

Speaking in another panel, Paul Lyle, of Western Printing and Lithographing Co., declared that both letterpress and offset are making big gains, and that consideration should be given to which process is best equipped to handle a specific job. He observed that "higher wages, shorter hours, higher costs and featherbedding contribute to the high cost of printing and may eventually force advertisers to use another media."★

New officers of the Research and Engineering Council: (l.-r.) Alan S. Holliaday, Craftsmen, Inc., president; C. M. Flint, Chas. T. Main, Inc., secretary; Paul Lyle, Western Printing & Lithographing Co., 2nd vice president; J. Russell Parrish, Meredith Publishing Co., treasurer; and C. J Jewett, Minnesota Mining & Mfg. Co., 1st vice president. Meeting was at McAlpin Hotel.



Figures 1a and 1b: Not the House of Mirrors at an amusement park, but a clever device developed in England which uses a series of reflections —and reflections of reflections—to exaggerate any error in a camera and to show whether or not it is correctly aligned.

It's all done with mirrors:

Reproduction to Accurate Size

By *Frank H. Smith*
Development Department, The Monotype Corporation, Ltd.,
Salfords, Redhill. Surrey, England

First Part of a New Series

I AM sure that American graphic arts craftsmen will have found, like their British counterparts, that occasionally, but with increasing frequency, they are asked to reproduce drawings and other originals accurately to size within very close limits of tolerance, not only in linear scale but sometimes in terms of area.

Throughout the history of the printing crafts there has always been the odd request of this kind (and very 'odd' we thought it was, at one time). Perhaps it is in our normal run of work, to illustrate a scientific report, or for a slide-rule maker; but it may be for an out of the ordinary job such as templates for an engineer's profile projector or a pattern for printed circuits.

World War II embroiled many of us (and doubtless many of you too) in the most exacting problems of precise size — for gunsights, bombsights and other 'graticules'* required in the execution of modern scientific war, for map making and for many engineering requirements.

I have found myself concerned with accurate work varying from such small details as the production of accurately placed lines, one thousandth of an inch thick, within plus or minus one ten thousandth of an inch, on the convex face of lenses, to the 'photo-lofting' of outline templates for aircraft construction, measuring six feet by eight feet within a tolerance of only plus or minus one thousandth of an inch per foot. At the moment I am making master negatives for some measuring gauges

*The American term "reticule" sounded strange to British ears because it is an old English word for a lady's small handbag, such as she uses in the evening!

containing 13 gauge sizes, varying from about .100″ to about .300″ with a tolerance of minus zero and plus .0003″ in the smallest and .0007″ in the largest. It is so 'tight' that it is difficult to hold the tolerance even in contact printed copies.

No doubt many readers will have had similar experiences — possibly with regard to printed circuit work, which steadily increases in volume and becomes more intricate and exacting every day. Certainly none of us can be sure that we shall not meet one or another of those problems sooner or later for, as always happens, many of the scientific engineering techniques evolved during the war have been continued into the peace.

We cannot say "We are honest and God-fearing lithographers who want no part of these new-fangled things" because, for all we know, the difficult freak job, which is such a thorn in our side today, may be part of a successful new process or piece of apparatus tomorrow and a source of new business which may help to pay the rent for years to come.

Let us consider how accuracy can be achieved, beginning with our normal graphic arts cameras and concluding with an entirely new method* which has not heretofore been generally published.

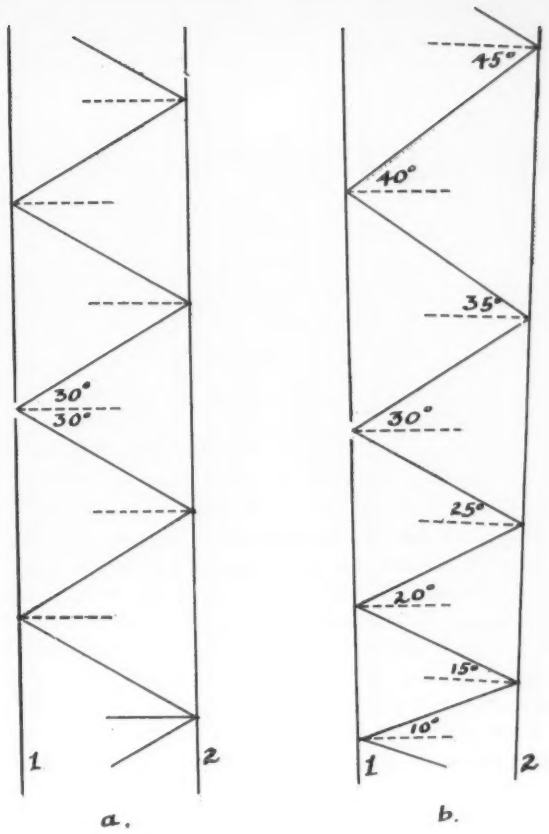
Squaring a Camera

Before we begin to use a camera for such accurate work as we are considering, it is apparent that we must first be sure that the image and object planes are parallel to one another and that they are accurately at right angles to the optical axis of the lens. One of the best ways of squaring a camera was invented by Raymond Southey, chief camera operator for Messrs. A. Sanderson and Co., Ltd., a well-known British firm of wallpaper manufacturers, and was published in the *British Journal of Photography* some time ago. It is an optical method which can easily be applied in the workshop and it is extremely sensitive and accurate.

Image — Lens Parallelism

For the purpose, one requires two pieces of good quality ordinary plate glass mirror with silvered back, each about 12 inches square. A hole, about a quarter of an inch in diameter, is scraped through the silvering in the center of one of the mirrors, which should also be bordered around the sides with a narrow strip of white adhesive tape. This mirror is then placed in the plate carrier of the camera, facing towards the lens. The lens and bellows are removed and the second (plain) mirror is fixed to the lens panel so that one can look through the hole in the first mirror at the second. One sees the reflection — of the reflection — of the reflection — and so on, in a series of reflections of the first mirror, apparently receding into the distance.

*"Accuracy in Printed Reproduction." Proceedings of the First Conference of the Association of Printing Technologists (England), 1957. pp. 35-41.

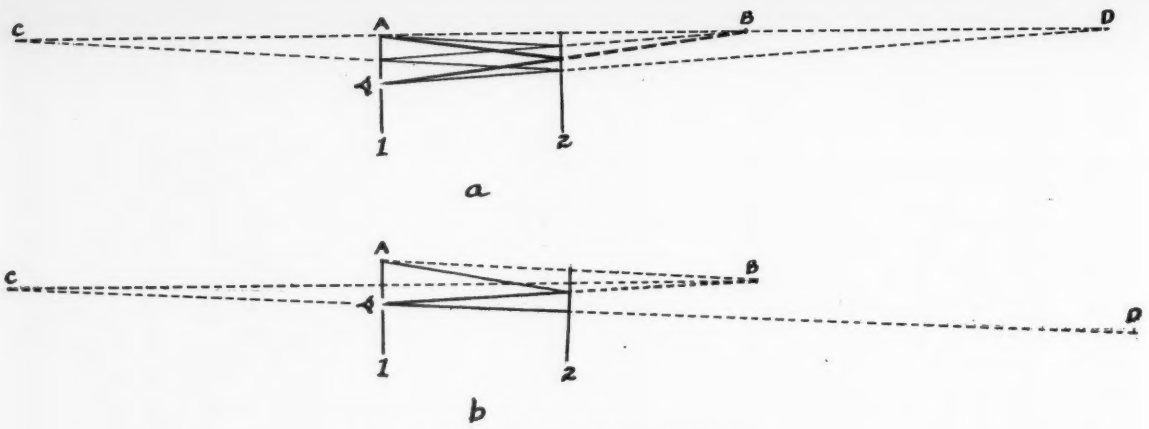


Figures 2a and 2b.

If the two mirrors are precisely parallel to one another, the series of reflections are seen to be accurately framed, one within the other, as shown in the illustration (Fig. 1a)* which is a photograph of what one sees, but if they are in the slightest degree out of parallel, then the series of reflections are no longer centered and the long 'tunnel' of reflections appears to be tilted at right angles to the plane of the inaccuracy. Thus, as may be seen in Fig. 1b, the top of the mirror is sloping away from the viewer, but only very slightly — a mere fraction of one degree — as will be appreciated when one works out what is happening to the reflections.

We may remember that when we were at school we learned the first and second laws of reflection which state that (1) "*When a beam of light is reflected, the angle of incidence equals the angle of reflection*" and (2) "*The virtual image, seen in a mirror, appears to be situated perpendicularly as far behind the mirror as the object is in front.*" In optics, the angles of incidence, reflection, refraction, etc. are always measured against a "normal"

*Of course, the fact that the plane of the lens panel is parallel to that of the camera back does not, with certainty, mean that the optical axis of the lens is exactly at right angles, but the axis of a modern lens is usually truly centered in the barrel and, in theory, a slight error should not distort the image, so the test is effectively precise for our purposes.



Figures 3a and 3b showing line of sight through mirror.

(a perpendicular) to the surface, but it is merely a scientists' trick to enable him to measure the angles even if the surface is curved, for of course one cannot measure an angle against a curve, because it varies, but one can readily erect a perpendicular and measure against that: so the method necessary for curved surfaces was adopted for all, whether curved or plane.

Consider the two elementary diagrams (Figs. 2a and b) and suppose, for a moment, that a beam of light is projected through the hole in the first mirror so that it falls upon the second at an angle of incidence of 30°. As may be seen in Fig. 2a, the angles of incidence and reflection remain at 30° at each reflection. But the second diagram (Fig. 2b) shows one of the mirrors tilted back at an exaggerated angle of 5°. If one follows the path of the upward beam of light until it strikes mirror No. 2, it can be seen that the normal to its surface is also tilted up 5° because the mirror is tilted by that amount, so the angle of incidence of the beam (and hence also the angle of reflection) is increased by 5°. Then, when the beam is re-reflected off mirror No. 1, it gains a further 5°, and so on. In the downward direction the reflection and each re-reflection can be seen to decrease by 5°. This explains the way in which the reflections, seen in Mr. Southey's test, so obviously detect the least difference from precise parallelism.

Of course, the mirrors are actually several feet apart and a quite minute difference in angle between them throws the line of sight out by a considerable distance. In Figs. 3a and 3b the positions of the virtual images in the mirrors are drawn according to the second law of reflection. For diagrammatic purposes, the drawings are out of scale; in practice the mirrors are proportionately much smaller and the angular differences are very much less. In each of the two diagrams 'B' is the position of the virtual image of the edge 'A' of mirror No. 1 as seen in mirror No. 2 ("perpendicularly as far behind the mirror as the object is in front"), and 'C' is the position of the virtual image of 'B' as seen in mirror 1; then 'D' is the position of the virtual image of 'C' as seen in mirror 2 — and so on for a series of images, each one on the right-hand side being progressively double the distance between the two mirrors farther away.

In Fig. 3a one sees the lines of sight through the hole in mirror 1, sighting at the right hand virtual images seen in mirror 2. The two thick lines show the path of the line of sight directed towards image 'B', the line from the eye striking mirror 2 in the line towards 'B' and thence reflected back to 'A'. The thin lines show the path of the line of sight directed towards image 'D', the line from the eye striking mirror 2, thence towards 'C', then from mirror 1 towards 'B' and finally back from mirror 2 to 'A'.

In Fig. 3b the same method is followed, but with mirror 2 tilted 5°. As may be seen, images 'B', 'C' and 'D' are progressively farther down and the lines of sight towards 'B' and 'D' are much more widely apart—actually they are 10° wider because mirror 2 is 5° out of parallel — in fact the angle of tilt is always doubled when reflected.

Image — Object Parallelism

Having checked and probably adjusted the planes of the camera back and the lens panel, the last task is to insure that the copyboard and transparency holder planes are also parallel to them. The easiest way is to remove the lens panel (if that is possible, and it often is) and to sight straight through the first mirror, still in the negative carrier at the image plane, to the second mirror, now placed on the copyboard or in the transparency holder.

If the camera is one of the all-metal kind from which the lens panel cannot readily be removed, one can place the first mirror in the transparency holder at the object plane and sight through at the second mirror laid on the front of the lens panel. The method is so simple that it is scarcely necessary to explain in greater detail what one should do; I am sure that readers will be able to decide the best way to apply it on their own cameras.★

NEXT: *Using a scale focused or auto-focus camera for very precise size.*

To help explain to your customers:

A Quick Guide To Color Separation

Conclusion

By *Andy Perni*
Colormation Litho Reproductions, Inc.
New York

SINCE 1948, transparencies have been employed more and more in place of artwork. The ease and mobility of the camera outweighs artwork sufficiently for the majority of subjects to be reproduced. Chromes for scenic views, live models, realism, sharpness and ease of separation have made this aspect of lithography quite prominent. However, the PM will be wise to consider some facts in evaluation of transparencies.

Analyzing the chrome is a subject that could be discussed at great length, like many of the topics mentioned in this article. However, the important facts are these:

Standard view boxes should be employed throughout the industry. That is, a white light viewer should be used which produces the same quality in the transparency in the production office, pressroom, color lab and ideally, in the client's office. To establish whether or not the chrome has an overall color cast can often be difficult. However, if there is a white or neutral gray somewhere in the picture, it should be compared to a good transparency of a gray scale (well photographed), which should be on hand at the viewer at all times.

It's surprising how often an overall reddish or bluish cast exists in the transparency that passes unsuspected by the layman's eyes. This of course adversely influences all colors. Even when the balance is correct, the transparency lacks the capacity to render all colors correctly. As stated previously, clean yellows go warmer, clean cyans become bluish and so on. The PM should alert the process color lab on important colors which may have shifted.

On scenic views or long distance photographs, the transparency may be accurate enough, in fact, often prettier than the original scene by virtue of the inherent increasing of contrast or brilliance. But on close views, especially studio shots of commercial products, examine carefully for color shift. When possible, recommend to the client that his photographer place a gray scale and color step tablet in the shot outside the cropped area to be used. These two items can help tremendously in proper interpretation.

Learn to look at a chrome critically and don't be influenced by the brilliant transparent effect of the colors. These can never actually be recorded on paper with ink anyway.

Proving

Whatever the separation technique used, the PM is primarily interested in the end product. What is the ultimate result? The halftone separation? Yes and no. Yes, in that the PM may purchase screened positives or negatives from the trade shop. But what happens when you print the job and the colors are wrong? Then the end product is the wasted stock and a lost client.

No, the PM must also have confidence in the separations. This may take one of a few forms. A proof of the work materially shows what the finished job will look like, provided it is printed with the specified inks (determined by the separator) on the stock on which the job will be printed, and printed in balance.

When the PM must forgo the proof because of economy or lack of time, he must rely on his confidence in his separation supplier. Repeated quality business produced year after year enables the PM to know in advance what he will get. When press proofs are supplied by the trade shop, be sure they come to you with the progressives in proper order, and with the correct density of ink deposit. Many jobs are spoiled because of ink variation from job to proof, or even during proving itself.

Color bars and gray scales of each color along the back end of the sheet indicate ink density and ink distribution. Learn to use a loop to check for "tailing" (a slur on the dots), double dotting, and proper trapping of wet colors on two- and four-color presses.

In recent years, proofs other than press proofs have appeared on the market which produce a general idea of color values. One such technique employs the use of transparent plastic colored sheets (simulating the process inks) overlaid in register on a white base. Another type uses a white opaque vinyl with coated dye images exposed and processed singly in register. These proving techniques, of course, only substitute for the press proof, but they do have their place when the client isn't too particular on low cost "pleasing color" work.

Color Correction

An often misunderstood aspect of separation work is color correction. This is usually used either of two ways:

1. To enable the printed reproduction to resemble the original, or;

2. To make a change from the original at the client's request.

In the first instance, color correction is the separator's responsibility

in that he should make the correct compensations in the presently deficient reproduction process. Were we to shoot artwork directly to halftone with no manipulation of corrective procedures, the printed sheet would be quite muddy. Converting the image to halftone dots contributes to a tonal distortion.

Modern separation filters and film sensitivities, although greatly improved, are short of perfection. Although difficult to believe, the cyan (process blue), and magenta (process red) inks are from 35 to 50 percent deficient in reflective values. These and other factors are problems which account for the difficulty in matching the original. Therefore these conditions demand color correction.

We color correct either by masking or by handwork (dot-etching), sometimes by a combination, to make up for what our photography and printing are not capable of doing directly.

In the second instance of color correction, that is, when the printed proof resembles the original, but the client wants a change made, color correction by handwork usually is necessary. Often, we are told to, "change the dress from blue to red," or, "take out that telegraph pole in the background." These things can be very involved both in time and cost. One of the major causes of color correction is usually the interpretation (or misinterpretation) of a color transparency, as explained previously.

Masking

Remember, in terms of color correction, masking techniques can only help to record the original as is. Masking cannot, in its normal sense, correct a deficient transparency to the true values of the original scene or product.

A relatively simple definition of masking is this:

The placing of an exposed and developed film negative (or positive), made from a positive (or negative), in register with another positive of the separation set to affect the densities in such a way as to improve the tonal rendition of colors as represented by that positive.

To the layman this may appear complicated but actually this is the simplest technique of all masking systems. In any event it's a photographic operation which retains sharpness and detail values, compared to hand art techniques such as staining, opaquing, etching, etc., which sometimes tend to look "touched", diffused and soft.

Often more important, masking serves to reduce the cost of separations, because it reduces the previously necessary labor time. However, masking is practiced in tremendously different degrees by the trade shops primarily because of its inherent technical difficulty and little understood principles.

Hand Correction

Long before masking appeared on the scene, litho artists did all the restoring on the separations to correct the deficient values. Today, these craftsmen concentrate more on polishing up the job. Dot-etching is used to a large degree on the customer's changes mentioned before. The PM can expect the color trade shop to add on additional costs due to changes, the amount varying with the extent of the corrections. When possible, be sure you provide as good a transparency as possible, even if you must have it dye retouched, to save headaches later on.

The term "dot-etching" isn't exactly correct. Etching of dots, a chemical process used to decrease the dot percentage, accounts for a very small part of the craftsman's skill. He actually does a great deal of correction with brush and stain on the continuous-tone negatives. Also, the dot-etcher may instruct the color cameraman to make special masks which he may use for silhouetting and correcting difficult colors.

Estimating the Cost

In estimating a price for your salesman or client, we realize the PM doesn't always receive proper specifications so it's quite understandable when inaccuracies occur in the preparation estimate. When calling your trade shop for a price on process color work tell them as much as possible. Because the preparation work can become very involved with plate size, sheet size, impositions, etc., we'll concern ourselves here only with estimating the process areas.

1. Type of Original — Some separation houses figure this into their price schedule by getting more money for artwork; others ask additional for transparencies or flexichromes.

2. Size of Original and Size To Be Reproduced — Usually the original size isn't too important unless it happens to be exceptionally large; here the important factor is reproduction size. Almost without exception, the charge is greater as the size is increased.

3. Focus — Sometimes a very important item. When large quantities of art or transparencies are involved the price can change radically when this information is known. I know of more than one case where an estimator lost a large printing job because he neglected to find out if the originals were in the same focus. Ganging up of the artwork helps reduce your separation costs. Again, this cost varies with the equipment in the trade shop.

4. Type Plates You Will Make — If the plates are to be made in your own shop, specify whether they're to be positive or negative working, deep-etch or albumin, presensitized or whatever.

5. Silhouetting — The PM should so specify, and should state whether the separations are to include this, or if silhouetting will be taken care of when plates are to be burned.

6. Process Inks — Many shops prefer to use the process inks they're accustomed to. However, it's best for

(*Continued on Page* 133)

—All photos by Mrs. J. Tom Morgan, Jr.

At SGAA: Left—Harold Cornay (third from left) congratulates reelected officers (l.-r.) Harold W. Braun, 1st vice president; A. A. Wade, president, Mr. Cornay; and W. Allen Blythe, 2nd vice president. **Center**—Kurt E. Volk, PIA, presents Grand Award to George F. Barbers, Kingsport Press. **Right**—M. G. Lewis, Mr. Wade, Raymond Blattenberger and Mr. Volk at exhibit.

Photo Story of SGAA Meeting

A FINE program and the pleasant surroundings of Jacksonville, Fla., drew 180 to the highly successful 38th annual meeting of the Southern Graphic Arts Association April 26-28 at the Hotel Robert Meyer.

Highlights of the convention were these:

- A keynote address by Kurt E. Volk, PIA president, on the value of trade association membership;
- A discussion of customer relations by William T. Clawson, director of advertising and promotion for Harris-Intertype Corp.;
- "A hard look at lithography" by Walter E. Soderstrom, executive vice president of NAPL;
- A report on paper, ink and type, by Ronald I. Drake, Champion Paper and Fibre Co., and
- A discussion of the Linofilm photocomposition system, by Herbert S. Rand, Jr., Mergenthaler Linotype Co.

As has become customary at these meetings, John H. Doesburg, Jr., once again led a lively labor seminar. Mr. Doesburg is general counsel of the Master Printers Section of PIA. On Monday evening, awards certificates for winners in the annual printing exhibit were presented by Mr. Volk. Winning specimens were on display during

(*Continued on Page* 139)

Other scenes at Jacksonville: Miss Elsa Wehr, (top, left) Champion Paper & Fibre Co. views exhibits. Officers and wives (bottom left)—Mr. Wade, Mrs. Carroll Blanchard, Mr. Cornay, Mrs. Wade, Mrs. Blythe, J. Tom Morgan, Jr., Mr. Blythe, and Mr. Braun. Speakers (from top)—Clawson, Drake, Soderstrom and Volk. Part of crowd at banquet (top, right) and C. A. "Cap" Lick, Jr., (bottom, right) at exhibit board.

A leading accountant gives some tips on

Hedging Against Inflation

By *Maurice E. Peloubet*
Pogson, Peloubet & Co.

HEDGING against inflation, whether we call it that or not, is a universal occupation or preoccupation. Every time a businessman tries to explain to a customer the necessity for a price increase, every time a labor contract or a long-term production contract is negotiated which includes escalator clauses, every time an employer gives a "cost-of-living" salary increase, somebody is trying to anticipate and equalize or nullify the effects of inflation.

What we are thinking about here is how to deal with an existing inflation which, it is assumed, will continue, in a milder or more virulent form, to be with us for many years. Remedies for inflation, most of which are simple, obvious and unpleasant, will not be considered. Like the severer types of virtue, everyone agrees with them, praises them and decides that, at the moment and for a variety of presently compelling reasons, this isn't quite the time for them.

Whether and when we will be forced to take some effective action to combat, rather than adapt ourselves to, inflation and what will be the consequences are questions as puzzling as those Sir Thomas Browne asked when he wondered "*What Song the Syrens sang, or what name Achilles assumed when he hid himself among Women.*"

But it seems clear we are going to listen to the inflationary Syrens, in the not too-enticing shapes of

Maurice E. Peloubet

radical congressmen and "progressive" labor leaders for several years to come, and business must be prepared for the people to follow them.

One reason I feel sure that this is so is found in the characteristics of the recent recession from which we are now recovering. It was, I submit, not the worst, but certainly the queerest of such episodes we have ever been through.

The physical effects of a recession were present: reduced sales, reduced production, unemployment and reduced business profits. Prices of commodities having a world market fell. But hourly wage rates and salary rates actually increased, although at a somewhat slower rate. Imports in many lines increased, and our own exports, which would be expected to increase in a time when smaller domestic volume would act as a spur to competition with foreign producers, actually fell off.

There are many other cases of the odd behaviour of various economic indicators in the recent recession but they all seem to point to the increasing rigidity of our domestic price and wage structure, regardless of the impact of world prices and conditions.

If we agree that inflation, creeping or leaping, is to be with us for long enough to base our business policies on, what shall we do?

I am going to confine myself to how a business can guard against inflationary effects and pressures. With a going business the problem is largely one of realizing income, paying costs and taxes and showing profits on the basis of current conditions. With an individual the problem is more the maintenance of his capital position. The individual wants his holdings of real estate, securities or commodities to be such that they will increase in nominal value at about the same rate as the inflation progresses. He is also concerned with the impact of new, punitive or discriminatory taxes directed against capital.

With a going business, except for one dealing with natural resources such as oil, gas or minerals, the business is permanent but the individual assets—inventories, supplies, receivables, cash and even machinery, equipment and buildings—are always being used up and replaced.

The principal problem posed by inflation here is to get back, in sales or other revenue, the true current cost of operation or manufacture plus a fair profit, and to pay a tax on the current profit rather than on a profit arbitrarily arrived at on a basis which discriminates between

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From a talk presented at the Lithographers and Printers National Association, Greenbrier Hotel, April 14.

different classes or groups of businesses or enterprises.

Sales and revenues are almost always received on a current basis. Even long-term contracts usually provide for payment when completed items are delivered or for progress payments of some sort. It can generally be assumed that the gross income of a business is received on a current basis.

Costs and expenses, however, fall into three main divisions when we consider how current they are: wages and services; materials and supplies; and the cost of using tools, machinery and buildings, usually known as depreciation.

Wages and employment costs usually are paid weekly and almost never over a longer period than a month, and are, therefore, entirely current. Services, such as electric light and power, water, gas, insurance premiums, dues and subscriptions, advertising, plant maintenance and plant protection and similar services are also paid currently. In this group, city, state and county taxes should also be included. None of these payments are made less frequently than once a year and may be considered as current.

Materials, supplies and finished goods inventories are somewhat less current than wages and services. Generally speaking, a business must keep an investment in inventories equal to at least several months' production. Material costs, wages and other expenses included in inventory increase through inflation. This does not mean that the inventory investment should be marked up to cover these increases. The increased costs should be charged out against current operations, if a current cost is to be arrived at.

LIFO Inventory

This is, in essence, what is known as the last-in, first-out or LIFO inventory method and is permitted for federal income tax purposes and is recognized as an accepted accounting practice.

For an industry such as lithography or printing, the application of the LIFO inventory basis on the "dollar-value" method would be the most practical. This means that the cost of the inventory at the close of the period would be calculated at both the beginning and ending prices. If the ending inventory at beginning prices were less than the total of the beginning inventory, the ending inventory would be written down at the beginning prices. If the ending inventory were larger than the beginning at beginning prices, the excess calculated at the ending price would be considered an additional "layer" at the ending price.

This method is widely used in manufacturing or processing industries. We do not know the future course of commodity prices, but it seems reasonable to believe that wages and services will continue to increase. As these elements form a large part of inventory costs, it might be advantageous, even at this late date, to adopt LIFO to counteract these inflationary tendencies.

An interesting example of this came to my attention a short time ago. A company making specialty alloy metals changed to the LIFO basis shortly after the end of the Second World War. It was clear at that time that certain rare metals would increase in value. The company, naturally, did not wish to pay a substantial tax on the unrealizable increase in value of these metals and decided to go on dollar-value LIFO, one pool for metals and, almost as an afterthought, one pool for labor and overhead.

At the present time the metals, after rising substantially in price, have now declined in price to about what they were when LIFO was adopted. If LIFO had not been adopted, additional tax would have been paid on the increase and recovered on the decrease. LIFO was helpful as it saved the payment of tax and collection of refunds but, so far as materials were concerned, the results between years were a stand-off.

But when we look at labor and overhead the picture is entirely different. Here there was complete protection against inflation and the advantage in this pool is some three or four times as great as the original, and presently non-existent, advantage in materials.

When the Westinghouse Electric and Manufacturing Co. went on dollar-value LIFO two years ago, it was almost entirely because of built-in cost increases in their labor contracts.

If it seems too late to go on dollar-value LIFO — a conclusion which should be arrived at only after careful study—it is at least worthwhile to be sure that the effects of it are reflected in your costs, both for estimating and financial purposes. Profits arrived at on this basis are the correct profits of the enterprise, no matter on what basis you pay taxes.

The effects of inflation are most apparent and severe in the third group of costs; cost of tools, machinery, equipment and buildings used up in operations. Here there is a time-lag of five, 10, 15 or 20 years between time when the the money was originally laid out and when it is recovered from the customer.

What Are Real Costs?

In the long run the businessman must recover his costs from his customer and he must recover his real costs, not something that just looks like them or something that the Internal Revenue Service says they are. What are the real costs of using tools? If the operation or business is to continue, the real costs are what it would cost to replace the tools. If the operation were a one-shot, liquidating proposition it might be considered that the costs were what was paid for them years before, and anything above that would be realized inflation. In any event, it is the going, continuing concern that must calculate its costs and these costs should be based on replacement values.

Lithography and printing are industries where these considerations are extremely important. The industry is composed of a comparatively small number of enterprises of substantial size and a large number of quite small units. The ratio of investment in long-lived property to current assets is high. The physical life of the property is long. Competition is keen. Improvements in machinery

(*Continued on Page* 141)

NYEPA Panelists: Rear (l.-r.) Webber, Materazzi, Lupo, Blank and Latham. Front (l.-r.) Thrush, Kronenberg, Whyzmuzis and Makarius.

NYEPA Forum and Show Attract 600 in New York

AN OVERFLOW crowd of more than 600 attended the Litho-show and forum staged by the Lithographic Division of the New York Employing Printers Association, May 2, at the Biltmore.

The dual affair was the first of its kind to be held in the New York area.

The morning session consisted of seven talks with a question and answer period following. After lunch, 40 supply firms opened their exhibits in a nearby room. In addition, the panelists from the morning were seated at a table on the exhibit floor to deal with special questions on an individual basis.

Theme of the show was "Solving Litho Production Problems." Seven speakers from the various fields of litho production spoke at the morning session. John Kronenberg, S. D. Warren Co., spoke on paper; John M. Lupo Jr., Di-Noc Chemical Arts Co., camera; Theodore Makarius, Pope & Gray Co., press; Albert Materazzi, Litho Chemical and Supply Co., plates; Paul Whyzmuzis, Printing Ink Div. Interchemical Corp., inks; William Webber, Lithographic Technical Foundation, research projects; and Edward Blank, NYEPA, litho management.

Mr. Kronenberg pointed out that lithography and the Fourdrinier paper making process came into being almost concurrently. However, while lithography has undergone a great many changes, paper making is still using the same basic process it started with. "Today's paper machines are bigger, faster, more precise but they are still Fourdriniers," he commented. "Contrast this with the spectacular breakthroughs in the lithographic process — the steam or power flatbed press, the direct rotary press printing from wrap around plates, the offset press, photo composing and so on."

He added, however, that it was the changes in the manufacture of paper which helped to make the great growth in lithography possible since the early thirties.

Developments in paper have been "evolutionary rather than revolutionary," according to Mr. Kronenberg, the most noteworthy being the gradual evolution away from rough, blotterlike, offset papers to smoother, harder, more compact ones; the development of offset papers with pigmented surfaces which lend, to a large degree, the advantages of coated stocks; the introduction, in 1937, of the first standard coated two-sided paper suitable for lithography; and the subsequent improvement of enameled papers along with improved inks and press techniques, permitting all lithographers to use coated papers with ease. Other improvements include the development of machine coated stocks, enabling the lithographer to compete for the volume market, and the development of cast-coated and luster-coated papers generally suited for both lithography and letterpress.

Following Mr. Kronenberg, John Lupo spoke on recent camera developments. Among the most noteworthy of these, he said, are the Haloid automatic film processor; gas agitation in continuous tone color development; increased use of strobe lighting; increased use of stable base film, and the electronic scanners for color separation.

"In new equipment," he said, "we have seen in the past year a trend toward cameras with varied electrical operating accessories and the use of special masking backs, ideal for certain procedures in color separation. Probably the most complicated of all types of equipment for color is the electronic scanner. Basically this machine scans the copy and electronically separates it into a continuous tone color corrected negative."

In hailing the advances in litho plates, Mr. Materazzi noted the increased use of presensitized plates, as reflected in a recent MODERN LITHOGRAPHY survey. He also pointed to the developments in surface treatment of plates, such as dry steel brush and wet brush graining, sand blast, and chemical graining.

He further pointed out the improvements in deep-etch platemaking chemicals, the advances in the hard metal field and the newly developed

(*Continued on Page* 137)

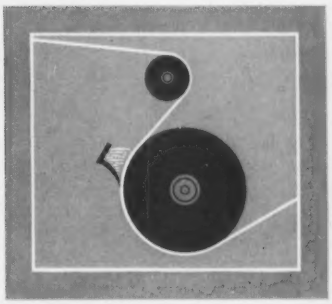
THE GREATEST ADVANCE IN PRINTING PAPERS IN MORE THAN 20 YEARS

OXFORD

North Star

MAINEFOLD ENAMEL

North Star Coated Papers are the First Complete Line of Top-Quality Coated Papers Produced by the Trailing Blade Process



The Trailing Blade Process

A flexible metal blade and a backing roll covered with soft rubber distribute the coating evenly and smoothly on the base paper.

Trailing Blade Produces A Level Printing Surface

The flexible blade, in combination with the soft, rubber-covered roll, fills in irregularities in the base paper and produces an exceptionally level printing surface.

North Star Coated Papers Bring You These Major Advantages:

Levelness. The trailing blade method produces a levelness of surface unequaled by conventional coating methods.

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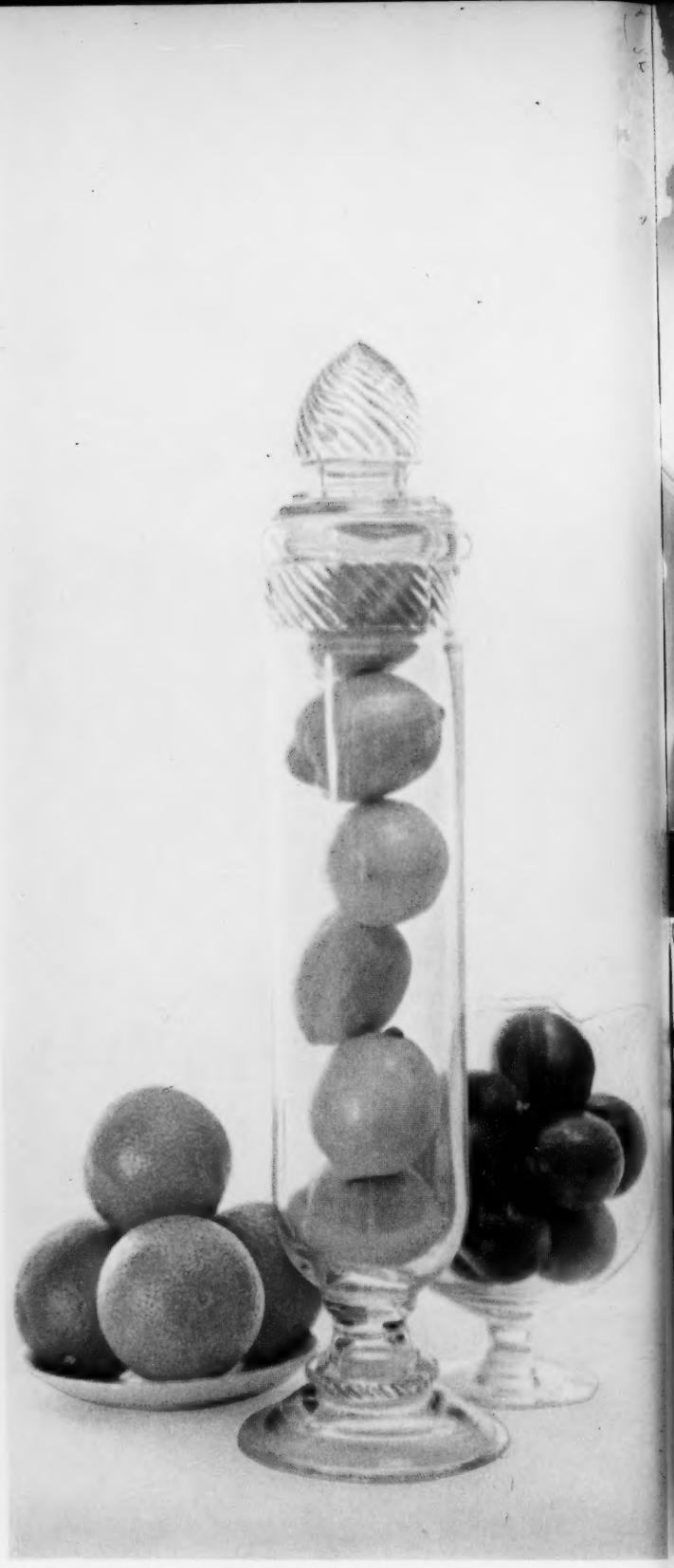
Cost. North Star Coated Papers cost no more than other leading grades of coated papers. But, because of their superior printing qualities, they offer greater value than other papers selling at the same or lower prices.

METALLIC

Uniform ink coverage is essential for quality printing results, especially with metallic inks. The remarkable levelness of North Star Coated Papers assures more uniform ink coverage.



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Sharp definition of halftone dots is the key to reproducing the delicate colors and subtle tones in a subject such as this. North Star Coated Papers have a built-in cushion which results in greater definition with less printing pressure.

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Black and white halftones depend upon contrast for maximum effect. The bright blue-white color of Mainefold Enamel makes halftones look almost like an original photograph.

GLOSS PROCESS

Gloss inks help to accentuate brilliant colors and sparkling highlights in a subject such as this. North Star Coated Papers are especially formulated to give outstanding results with gloss inks, as well as regular inks.

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LETTERPRESS PAPERS

POLAR SUPERFINE ENAMEL is Oxford's finest letterpress enamel. It has a bright white, mirror-smooth surface and a superb affinity for printing inks. It is *the* paper for de luxe booklets, catalogs and folders where flawless reproduction of colors, tones and detail is demanded. It is recommended for halftones up to 150-screen, and is suitable for regular, gloss or metallic inks.

MAINEFOLD ENAMEL is a choice letterpress enamel paper, blue-white in shade, with a high-gloss finish. It is the outstanding value in its price range, combining exceptional printing qualities with visual appeal carefully balanced for brightness, shade and polish. It is recommended for halftones up to 150-screen, and is suitable for regular, gloss and metallic inks.

POLAR ENAMEL DULL is a unique dull finish letterpress enamel. It combines a soft, velvety texture and a surface virtually free from polish or glare with printing qualities comparable to many high-gloss enamel papers. It is ideal for booklets and folders containing both text and illustrations such as annual reports. The matte finish adds color and brilliance to the illustrations and also makes the text easier to read. Polar Enamel Dull is recommended for halftones up to 133-screen, and is suitable for regular, gloss and metallic inks.

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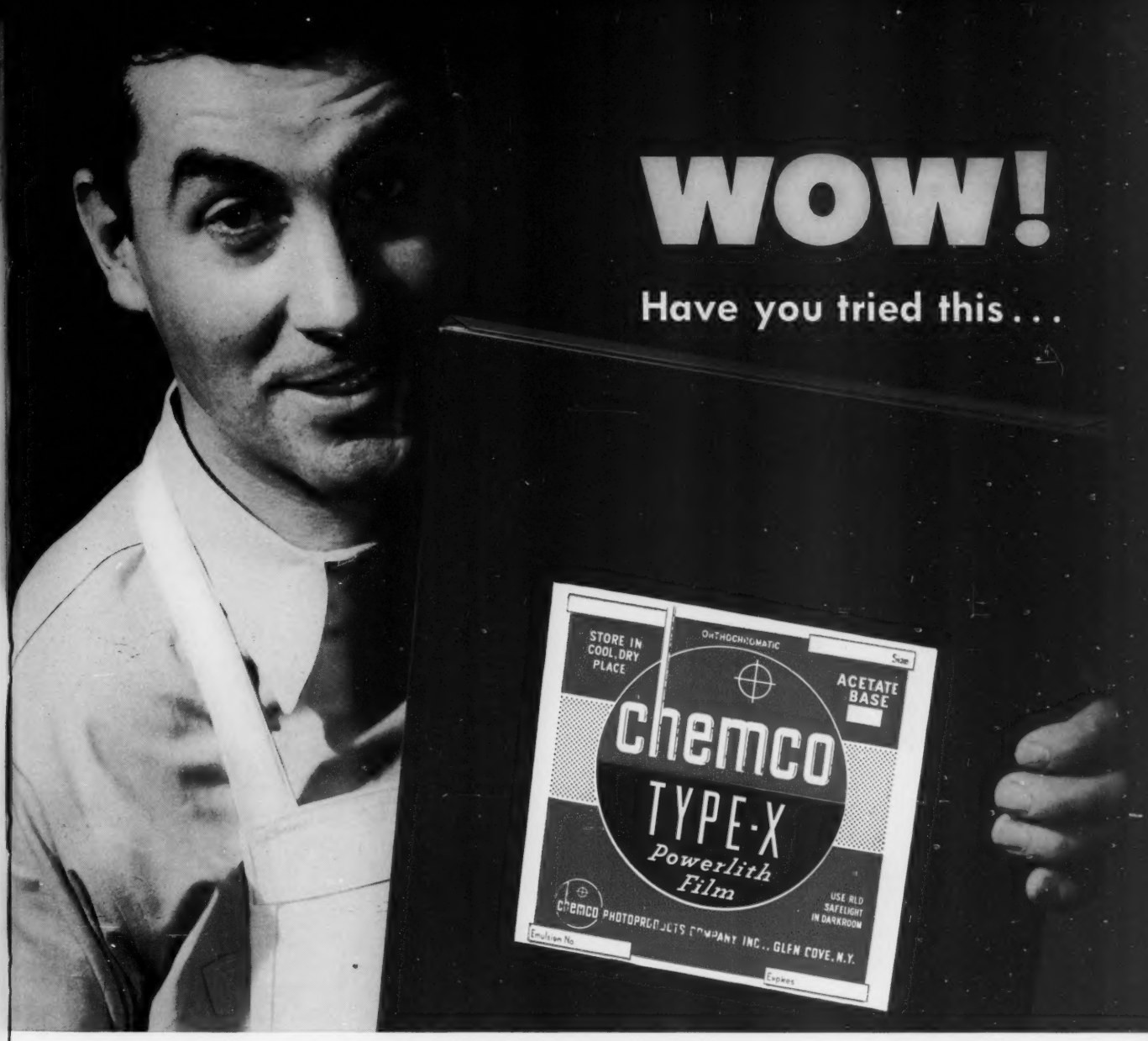

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TECHNICAL SECTION

To prevent blindness in deep-etch plates:

The Nicohol Treatment

By *Charles Gramlich*
Supervisor, Metals and Surface Chemistry Division and

Edward J. Martin
Supervisor, Reduction to Practice Division
Lithographic Technical Foundation

COPPERIZED aluminum deep-etch plates have become very popular all over the country. Runs of 300,000 to 500,000 are common. We have even had reports of runs close to three million. However, in spite of the general success of these plates, LTF has received numerous reports of copperized aluminum plates which became blind after fewer than 20,000 impressions.

After a study of a number of these plates it was reasoned that something was affecting the bond between the lacquer and the copper or the copper and the aluminum base metal. There are several things which can prevent a good bond of the image base to the plate metal. These include incomplete development, moisture on the image areas, and oily materials which may be present in poor grade alcohol or plate washes. These are things we knew about. But, some instances of blinding have been reported which could not be traced to these causes.

In work that followed at the LTF Laboratory, it was found that the deep-etching solution can also be responsible for a poor bond of the copper to the aluminum. Many of the deep-etching solutions used on aluminum plates contain ferric (iron) chloride.

When such a solution reacts with the aluminum, part of the iron of the ferric chloride is reduced to metallic iron. In the usual time required to deep-etch a plate, this iron forms an amorphous or powder-like deposit in the image areas which does not hold tight to the plate metal. If not removed, the varying amount of this deposit on different plates is what causes them, at various times, to become blind.

It is easy to detect this powdery deposit of iron. After development, the image areas are white. During deep-etching with a ferric chloride type of deep-etching solution, the image areas first become gray and with longer deep-etching, almost black. When the plate is washed with alcohol, a considerable amount of this loose black material comes off onto the paper wipes. Chemical analysis of this black material at the LTF research laboratory showed that it consisted mainly of iron.

Press tests showed a good correlation between the quantity of the iron deposit and the tendency of the plate to blind. The longer the plates were deep-etched, the more iron that was deposited, and, if not removed, the easier the plates blinded on the press.

The logical next step was to find an easy method of removing this iron deposit left by the deep-etching solution. Such a method should:

1. Not attack the deep-etch stencil,
2. Remove the iron deposit without attacking the aluminum, and
3. Not change the surface of the aluminum so that copper will not deposit on it.

Several materials were tested. The best of these was a solution of concentrated nitric acid in a glycol ether solvent. The solution has been named "Nicohol" and its exact formula has been released to LTF members.

How To Use Nicohol

The Nicohol solution is applied to the plate after it has been deep-etched. After deep-etching, the platemaker should wash the plate with alcohol and rub with paper wipes to remove the deep-etching solution. Continue to wipe the plate with paper wipes until it is dry. Then apply the Nicohol solution. Pour on a liberal amount and swab it over the entire plate with a deep-etching pad used for this purpose only. Handle this pad the same as you do during development. Swab the solution on the plate for about one minute or until it is evident that all of the iron or

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gray color in the image has been removed and the image areas are again white. Then wash the Nicohol solution from the plate with more anhydrous alcohol and paper wipes. Following this, copperize the image areas as usual. The copper deposits a little more slowly and with a slightly different color than on iron. However, LTF found that the copper adheres to the aluminum much better than when the Nicohol treatment is not used.

In photomicrographs of halftone dots on an aluminum plate which have been etched with deep-etch solution containing ferric chloride, deposit of iron in the dots is easy to see. In other photomicrographs, dots which have been etched with the same solution and then treated with Nicohol are shown to be completely free of iron. Without the Nicohol treatment, iron deposit tends to fill the etched halftone dots.

Press Test

At the LTF research laboratory, it is customary to make press plates with a number of different treatments on one plate. In this way it is possible to find the advantages or disadvantages of any treatment or any combination of treatments under the same press conditions. (The technique of making such test plates is described fully in LTF's latest platemaking bulletins and in LTF's Audio Visual No. 16.) As a result of many press tests of this kind we are able to conclude these things:

1. The images which best resisted blinding had been treated with Nicohol after deep-etching, then copperized, and lacquered with non-blinding lacquers.

2. In all cases, Nicohol treated areas resisted blinding better than comparable areas not treated with Nicohol.

3. Nicohol treated areas, followed by lacquer alone, look fairly good but are not as ink receptive as when they are copperized before lacquering.

On one such test plate, the right side was given the Nicohol treatment while the left side had the usual alcohol washes without Nicohol. The bottom half of the plate was copperized. A band across the center of the plate was lacquered. This gave us a test plate with eight different treatments on it. (Alcohol only, Nicohol only, alcohol plus lacquer, Nicohol plus lacquer, alcohol plus copper plus lacquer, Nicohol plus copper plus lacquer, alcohol plus copper and Nicohol plus copper.)

The plate was run on the press to get the initial good sheets to show all areas printing satisfactorily. Then it was given a wet wash to remove the ink from the image areas and treated with a "1:64" etch (1 part phosphoric acid plus 64 parts gum arabic solution). The etch was smoothed down, dried and allowed to stand for five minutes. The etch was then washed off the plate thoroughly with water and more sheets were printed. This treatment was repeated once more. Then it was repeated two more times using a much stronger "1:32" etch (1 part phosphoric acid plus 32 parts gum arabic solution).

At the end of this series of treatments, it was apparent that certain platemaking methods do not resist this kind of treatment. The image treated only with alcohol was almost completely blind and the one with Nicohol only a little less blind. The "copper only" images were also very blind with either alcohol or Nicohol as a previous treatment. This shows that copper can be made water receptive by gum.

The alcohol plus lacquer area blinded much more than the Nicohol plus lacquer areas. The best area on the alcohol side was alcohol plus copper plus lacquer but even it was a little blind. The area with the least blinding and the best affinity for ink was the one treated with Nicohol followed by copperizing and lacquer. With such a plate, you can run the ink rather spare to print sharp, clean halftones and still have good coverage for type matter and solids.

This shows how it is possible to check various image treatments. It is one example of how it can be proved that a deep-etched aluminum plate treated with Nicohol and then copperized and lacquered is very resistant to blinding by desensitizing etches and the acids and gums which are usually in fountain solutions.

Some lithographers are using deep-etch aluminum plates which are lacquered but not copperized. Our press tests showed that Nicohol is also helpful on such plates. The area treated with Nicohol and lacquered, resisted blinding much better than the area that was just washed with alcohol and lacquered. But, it is not nearly so good as the full Nicohol-copper-lacquer treatment.

The Nicohol treatment can also be used on deep-etched zinc plates.

Other Causes of Blind Plates

We believe that the powdery deposit of iron left in the image areas of deep-etch plates is easily loosened by the acids in etches or strong fountain solutions and is one of the main causes of early blinding on the press. However, there are other reasons why deep-etch plates sometimes go blind.

For example, deep-etch plates may go blind if they are not completely developed. In this case, a thin film of gum arabic remains on the image areas. The lacquer or copper does not adhere as well to the base metal. Blinding due to this cause usually appears early in the run. Incomplete development can occur when the development time is too short or when the Baumé of the developer is not adjusted for a deep-etch coating which has become too hard because of too much dark reaction before the plate is developed.

The use of an inferior grade of anhydrous alcohol or other plate wash can also cause a deep-etch image to walk off. Some alcohols and plate washes leave an oily deposit when they evaporate. Such an oily film in the image wells can prevent the lacquer from forming a good bond to the copper or to the base metal.

A simple test is used at the LTF laboratory for anhydrous alcohol or plate washes. A few drops of it is placed on a clean piece of glass. It is then allowed to evaporate with the help of a fan. The glass is then checked for any oily film which may

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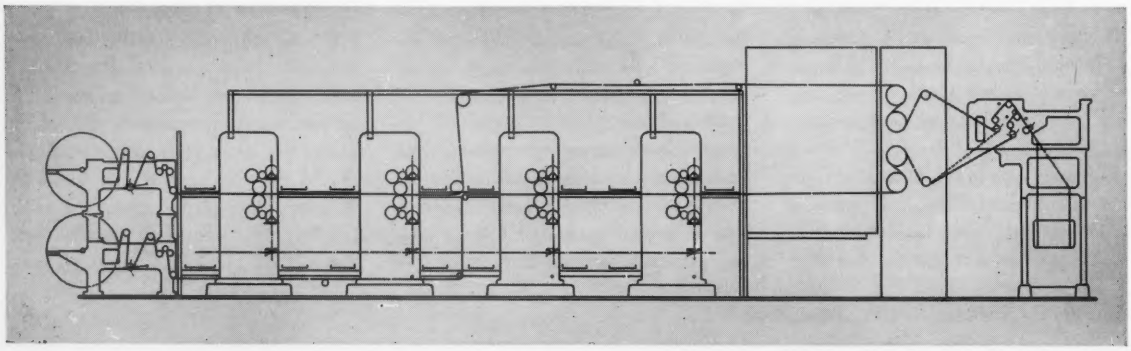

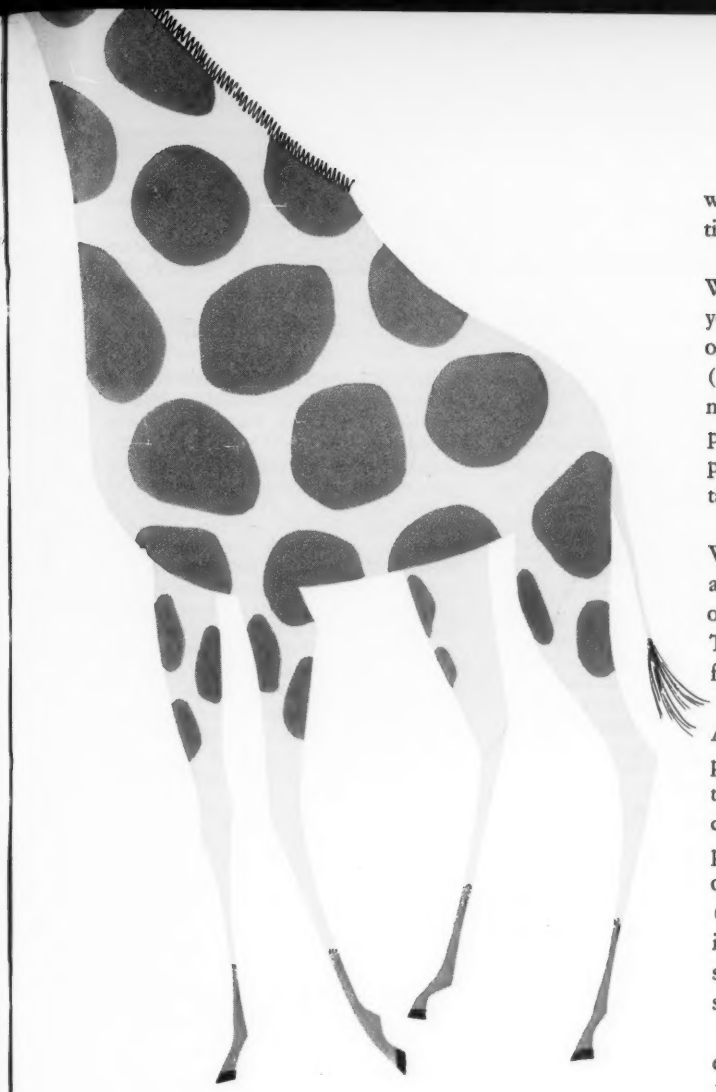

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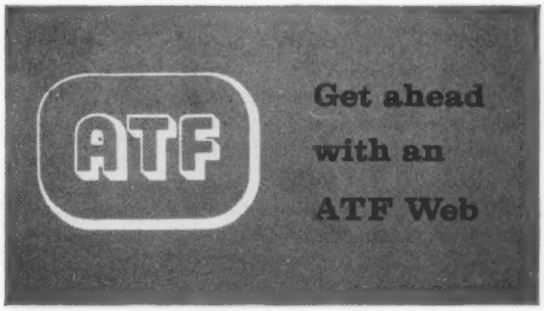

remain. Washes that contain oily materials should not be used as a final wash.

Another cause of image blinding is moisture on the image areas at the time lacquer is applied. In humid weather especially, plates should be fanned for several minutes before lacquer is applied. In such weather, the last alcohol wash should be completely removed from the plate with paper wipes before the fan is turned on. If you have a considerable amount of alcohol on the plate when you turn on the fan, the evaporation of the alcohol will cool the plate. If the relative humidity is very high, the plate can be cooled to the "dew point." Then, moisture in the air will condense on it as it does on the outside of a glass of ice water. Lacquer applied to a plate with such a film of moisture on it, can not bond properly to the copper or the base metal. It can not bond properly even if the condensed moisture is allowed to dry first because the base metal in the image area oxidizes or corrodes as the water evaporates.

Still another cause for the ultimate blinding of deep-etch plates is wearing because of abrasive material in the ink or paper coating, or to overpacking between the plate and the blanket.

Naturally, if any of these are causing your plates to go blind, the use of Nicohol will not cure the trouble.

Conclusion

While there are several causes for blind deep-etch plates, we believe that one of the most important ones is the formation of a loose, powdery deposit of iron which remains in the deep-etched image wells. The deposit results from a reaction between the plate metal and the ferric chloride in the deep-etching solution.

It is possible to remove this deposit of iron with the LTF Nicohol Solution.

Aluminum deep-etch plates which have been given a "Nicohol" treatment following deep-etching, and then copperized and lacquered, show a remarkable resistance to blinding on the press. The regular use of "Nicohol" should improve the average life of deep-etch plates.★

TECHNICAL BRIEFS

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Photography, Tone and Color Correction

*Optical Methods for the Improvement of Photographic Images. M. Tamura. *Journal of the Society of Science Photography*, Japan, 1957 20, 93-95; Photographic Abstracts, Vol. 38, Part 3, 1958, page 221. Based on the analogy between an electrical communications system and the photographic image, various methods were devised of removing the graininess of photographic or the dot-structure of halftone images, sharpening out-of-focus images, or increasing their contrast. Some of there were tested experimentally.

Some Experiments on Image Quality in Photographic Lenses. D. F. Carr. *Journal of Photographic Science*, Vol. 6, No. 4, July/August, 1958, pp. 107-111, 5 pages. Resolving power, lie profile, edge profile and spatial frequency response have been determined for a 10¼" F/4.5 photographic objective. The results for a series of positions on axis are presented and discussed.

A Method for Determining the Density Distribution of Halftone Dots. F. Pollak and M. C. Lloyd. *Journal of Photographic Science*, Vol. 6, No. 4, July/ August, 1958, pp. 112-118, 7 pages. An area of the dots to be measured is cemented to an area of large dots (very small holes) of the same spacing, so that a large moiré pattern results. The moiré "dots" are in effect enlargements of the dots under test, and their density contours are obtained by contact-printing the combination together with a step wedge on sheets of a suitable photographic material, using various exposures. In each print the density printed through is indicated by the step wedge, while the corresponding contour is indicated by the innermost row of small dots which have just printed. A contour map is then obtained by placing the prints in the negative carrier of an enlarger and tracing the isopaques on a sheet of paper on the easel.

Nitrogen Burst Agitation. Herbert P. Paschel. *Modern Lithography*, Vol. 26, No. 3, March 1958, pp. 70, 139, 2 pp. Question and answer article on nitrogen burst agitation.

Planographic Printing Processes

*Lithographic Printing Plates. U. S. Patent 2,814,988, May 19, 1954. S. W. Brad-

street and J. S. Griffith (Armour Research Foundation). *Photographic Abstracts*, Vol. 38, Part 3, 1958, page 226. A thin cryptocrystalline zirconia layer is formed by spraying a solution of amonium zirconyl carbonate on a metal plate heated to 300°-600°F. The surface is physically similar to lithographic "stone."

*Lithographic Platemaking Method. U. S. Patent 2,804,388. A. B. Dick Company. *Photographic Abstracts*, Vol. 38, Part 3, 1958, page 227. A positive working plate, i. e., one in which it is not necessary to make a negative, is prepared by applying a coating containing light-sensitive diazo fluoborate, which releases hydrofluoric acid by reaction with ultraviolet light, and an organo-silicon compound to a backing sheet having a water-receptive, ink repellent surface.

*Planographic Printing Plates. U. S. Patent 2,800,077, March 27, 1952. T. U. Marron (A. B. Dick Company) *Photographic Abstracts*, Vol. 38, Part 3, 1958, page 227. A lithographic printing plate comprises a base sheet, such as paper, sheet film or metal foil carrying a continuous hydrophilic coating in which an ink-receptive, water-repellent material is dispersed as discrete, minute particles. On pressure by a typewriter key or stylus the disperse phase is ruptured to form an ink-receptive, water-repellent area on the surface of the plate. In another form the liberated ink-receptive, water-repellent material is transferred to a lithographic plate from a contacting sheet carrying the polyphase system which is subjected to local pressure through the back of the sheet.

*Glyoxal-Treated Bichromate Layers U. S. Patent 2,822,280 106/146 8/3/53-2/4/58, W. H. Martin to Harris-Seybold Co. *Ansco Abstracts*, Vol. 18, No. 9, September 1958, page 376. Plate coatings with higher casein concentrations without difficulties due to high viscosity and of increased light-sensitivity are possible by the use of glyoxal. Mixtures of 30 parts albumen with 70 parts casein or of 70 parts albumen with 30 parts casein are preferred, and .05-.25 part of glyoxal per part of protein is used. As preservative .2% of silver nitrate may be added to the coating solutions of pH 8 - 10.3.

*Graining Zinc Offset Plates. U. S. Patent 2,860,039, April 4, 1955. Paul H. Margulies and Henry E. Winters, assignors to Food Machinery Chemical Corporation, San Jose, California. *Official Gazette*, Vol. 736, No. 2, November 11, 1958, page 419. 1. A process of chemically graining cold rolled alloy zinc offset plates which comprises treating the plate with an aqueous solution comprising 1 to 5 percent sulfuric acid and 1 to 10 percent hydrogen peroxide by weight.

Lithography—General

Rolling up the Plate. Oscar Diehl. *National Lithographer, Vol. 65, No. 3*, March 1958, pages 44, 46, 2 pp. Two methods for preserving a litho plate, by either press roll up or hand roll up, are discussed. Press roll-up consists of running waste with fountain off, drying plate, dusting plate with talc or such, gumming up, washout and then applying asphaltum. When you handroll-up a plate, washout with H_2O and turps, rub up with turps, hand roll-up which is critical, powder, etch, gum, and washout and preserve.

How to Handle Presensitized Plates in Your Offset Plant. Gyan P. Madan. *Inland Printer*, Vol. 141, No. 1, April 1958, pages 50-3, 4 pages. With the increasing use of presensitized plates by both small and large scale offset users, steps are given to insure the best reproductions possible. It is impossible to standardize techniques because of the different types of presensitized plates available. The steps thought to be critical are good negative; masking and stripping; exposure, which involves handling of the plate, printing frame factors, and time.

Disposable Dampener Coverings. Anonymous. *Print and Paper Review*, Vol. 4, No. 10, July 1958, pages 454-5, 2 pp. A very generalized discussion of new dampener covers, including pros and cons of (1) impregnated paper strips and (2) plastic sleeves on special rollers (3M system). Paper dampeners are very easy to apply after sufficient experience. They offer finer dampening control, ease of cleaning and speed in changing to another color. They do not accept ink. There is some paper fluff which might cause abrasion to the plate. The Dis-cover and Dis-base rollers are also easy to apply (being a knitted material which ties down at one end), need only light pressure, are quickly changeable to another color, are very ink receptive, and run very true. The author points out that ink receptivity of the rollers is a psychological obstacle to the pressman but it has no effect on the good performance of the dampener. With all the new dampeners coming out, the author suggests that with the reduced setting on the dampening unit, it may become more difficult to make rollers rotate. He also notes that one British dampening system has special drive for dampening unit.

Using Small Offset Equipment to Increase Profits. John C. Jackson. *Inland Printer*, Vol. 142, No. 1, October 1958, pages 64-5, 2 pages. The article discusses the economics of using small offset equipment for special short run jobs to increase profits. Many jobs are turned down by lithographers every day because these jobs will not fit their large production equipment. Since the customer will not pay the high cost for the use of this equipment, many jobs which could have been printed economically on smaller equipment at a profit are lost.

Three Colour Lithography For Short Runs. M. Hepher. *Printing Technology*, Vol. 11, No. 1, August 1958, pages 40-55, 16 pages. A thorough description is given of aims, production details, and choice of inks and paper. An inexpensive machine coated paper has been found to give high contrast reproduction with good gloss.

Putting Screen Tints to Work in Litho. John Scouller. *Modern Lithography*, Vol. 26, No. 3, March 1958, pp. 34-6, 3 pages. Use of screen tints discussed. Several methods are detailed. List of screen tint suppliers is given at end of article.

Metal Decorating in England. Part I of Three Parts. John Matthews. *Modern Lithography*, Vol. 26, No. 3, March 1958, pp. 83-6, 141, 5 pp. A description of tin coating by the Metal Box Co. Ltd. including historical notes and current methods of art production, photography, platemaking and printing. Bimetallic plates have given up to a million impressions. Deep-etch gives satisfactory results for average runs of under 2,000 sheets. Anodized aluminum is being used successfully on runs to 100,000 sheets. Press speeds of 6,000 sph are reached with the largest sizes. Various feed devices are described.

Lithographer's Dermatitis. Harlan M. Levin, M.D., Matthew J. Brunner, M.D., and Herbert Rattner, M.D. *Journal of the American Medical Association*, Vol. 169, No. 6, February 7, 1959, pages 566-69, 4 pages. In a study of the cause and prevention of dermatitis occurring among lithographers, 100 men representing all job categories within the industry were examined, and 76 men with active eruptions at the time or in the past were compared with 24 men free from dermatitis. The data indicated that the most important chemical substances concerned were compounds of chromium but that defatting of the skin (by soaps and solvents), traums, and contact with acids and alkalies render the skin more susceptible to the action of primary irritants and allergenic agents. The use of mechanical protection of the hands interferes with delicate manipulations, and protective ointments interfere with the surface phenomena on which lithographing depends. Fundamental changes in procedure may be necessary in order to reduce the incidence of disability in this industry.

Graphic Arts—General

*Reproduction Process Based on Photoelectric Effect in Connection With Electrolysis. German Patent 913,022, June 21, 1954. Ottaker Beer. *Chemical Abstracts*, Vol. 52, No. 13, July 10, 1958, column 10784. The arrangement consists of a transparent plate (e.g. glass) upon which a semitransparent, conducting layer is deposited. This comes into contact with a photoconductive

(*Continued on Page* 147)

"CRONAR ⌖ Films have completely eliminated makeovers due to size changes and have helped cut our film inventories in half."

—Albert Goller, President, Fine Arts Lithographing Co., Inc., Kansas City, Missouri

Fine Arts Lithographing Company produces an average of one million impressions per five-day week... everything from catalogs and brochures to labels and inserts. Du Pont CRONAR Graphic Arts Films are used for most of the total requirements for this work, including CRONAR Ortho A for all projection and contact, line or halftone, negatives and positives. Since using CRONAR films, the company has eliminated out-of-register makeovers and substantially reduced operating costs.

Delicate glass plates no longer create handling or storage problems, nor do acetate films cause production delays in getting out top-quality work. In Mr. Goller's words, "Now that we are using CRONAR, jobs are handled *faster* and *easier*. We save stripping time and the etcher can release each film as he works on it rather than having to hold up the whole job until all films are finished."

Etcher Matthew Monks works on a film positive. Dimensional stability of CRONAR Films means that he does not have to hold up an entire job while working on one piece of film.

CRONAR Graphic Arts Films are saving costs and valuable time in leading shops everywhere. They can in your plant, too. Ask your Du Pont Technical Representative for more information or a demonstration. E. I. du Pont de Nemours & Co. (Inc.), Photo Products Department, Wilmington 98, Delaware. In Canada: Du Pont of Canada Limited, Toronto.

⌖ *Symbol and CRONAR are Du Pont trademarks for polyester graphic arts films.*

This advertisement was prepared exclusively by Phototypography.

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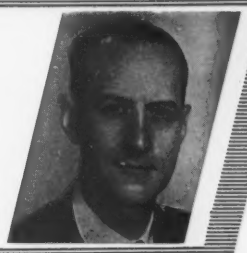
Better Things for Better Living
... through Chemistry

PHOTOGRAPHIC CLINIC



By *Herbert P. Paschel*
Graphic Arts Consultant

Single Solution; Books on Color

Q: Is there anything to the idea of a single solution for both developing and fixing? Are such solutions currently available and in use?

B.B.H., PHILADELPHIA

A: The idea of single-solution processing has intrigued photo-scientists and photographers alike almost since the inception of photography itself. Literature on the subject dates back beyond the turn of the century.

Considerable interest in one-step processing has been shown in recent years by the photographic departments of the armed forces, by the producers of motion pictures for TV, and others. Monobaths, as these solutions are called, are being used for many applications, although most of them are in connection with continuous tone emulsions on paper or film.

The Cormac Chemical Corporation, 80 Fifth Avenue, New York 11, recently introduced "Unibath", a monobath solution in five different types, one of which is claimed to be designed for use with line and halftone negatives.

The advantages of monobath processing include a reduction in time, equipment and space requirements. In addition, since the developing and fixing actions are compensatory, it is claimed variations (errors) in processing time and agitation do not have any appreciable effect on the result. However, line and halftone photography is the one application which has been given the least attention in past and present investigations. We shall have to wait for additional experience before we can condemn or condone monobath processing in the graphic arts.

It is impossible for Mr. Paschel to give personal replies by mail, but all questions will be answered in this column as soon after receipt as possible. The columnist also is available to the trade as a consultant for more complex litho problems.

Books on Color

This columnist served on the panel of the recent seminar sponsored by the Manhattan School of Printing, in New York, on April 2, 1959. The subject of the seminar was "Color—How To View It." The presence of a capacity audience, despite inclement weather, indicated that this is a subject of considerable interest and importance to graphic arts workers. But the nature of some of the questions asked by the audience indicated to this writer that one of the biggest problems is a lack of understanding of the fundamentals involved and, to some extent, serious misconceptions about the nature of color, light and vision.

Unfortunately, the educational facilities in the graphic arts field have not yet developed to the point where the subject of color is adequately covered. This leaves the average worker to his own resources — his major source of information being the available literature on the subject. The following books, although not new editions, are worthy of mention in this regard since they contain the type of information necessary for a fuller understanding of color reproduction and its attendant problems.

The 22 chapters of *Colour — In Theory and Practice,* cover the subject in its many and overlapping aspects. The physical and chemical nature of color stimuli are treated in great detail in the first eight chapters. The following seven chapters are devoted to the physiological and psychological aspect of color sensation. The balance of the book deals principally with color measurement and color matching.

Originally published in 1939 as the cooperative work of H. D. Murray and D. A. Spencer, the currently available edition was revised and largely re-written in 1952 by a group of experts under the editorship of Mr. Murray. In addition to being profusely illustrated it also provides references for more advanced or specialized reading.

This book very lucidly details the independent nature of light, colorants and the human observer and then explains their combined effect in producing what we normally call a "color" but which is in reality no

(*Continued on Page* 133)

Litho Schools

Canada—Ryerson Institute of Technology. School of Graphic Arts, 50 Gould St., Toronto, Ont., Canada.

Chicago—Chicago Lithographic Institute, 1611 W. Adams St., Chicago 12, Ill.

Cincinnati—Ohio Mechanics Institute, Cincinnati, Ohio.

Cleveland—Cleveland Lithographic Institute, Inc., 1120 Chester Ave., Cleveland 14, Ohio.

Los Angeles—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.

Minneapolis—Dunwoody Industrial Institute, 818 Wayzata Blvd., Minneapolis 3, Minn.

Minneapolis Vocational High School, 1101 Third Ave. South, Minneapolis 4, Minn.

Nashville—Southern School of Printing, 1514 South St., Nashville, Tenn.

New York—New York Trade School. Lithographic Department, 312 East 67th St., New York, N. Y.

Manhattan School of Printing, 72 Warren St., New York, N. Y.

Oklahoma—Oklahoma State Tech., Graphic Arts Dept., Okmulgee, Okla.

Rochester—Rochester Institute of Technology Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 8, N. Y.

Pasadena—City College, 1570 E. Colorado St., Pasadena, Cal.

Philadelphia — Murrell Dobbins Vocational School, 22nd and Lehigh, Philadelphia, Pa.

Pittsburgh—Carnegie Institute of Technology School of Printing Management, Pittsburgh.

San Francisco—City College of San Francisco. Ocean and Phelan Aves., Graphic Arts Department.

St. Louis—David Ranken, Jr., School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.

Vancouver—Clark College.

West Virginia—W. Va. Institute of Technology. Montgomery, W. Va.

Trade Directory

Internatl. Assn. Ptg House Craftsmen
P. E. Oldt, Exec. Sec'y.
Room 307; 411 Oak St., Cincinnati 2.

Lithographers and Printers National Association
Oscar Whitehouse, Exec. Dir.
1025 Connecticut Ave., N.W., Wash., D. C.

Lithographic Tech. Foundation
William H. Webber, Exec. Dir.
131 East 39th St., New York 16, N. Y.

National Assn. of Litho Clubs
Frederick Shultz, Sect.
Buckbee Mears Co., Toni Bldg., St. Paul 1, Minn.

National Assoc. of Photo-Lithographers
Walter E. Soderstrom, Exec. V.P.
317 West 45th St., New York 36, N. Y.

National Metal Decorators Assoc., Inc.
James G. Smith, Secretary
P.O. Box 506, Crawfordsville, Ind.

Printing Industry of America
Bernard J. Taymans, Mgr.
5728 Connecticut Ave., N.W., Washington, D.C.

Pennington Press executives examine first copies of Spring list. From left, Roy Protzman, vice president and general manager; Robert B. Pennington, Jr., president and publisher; and Jean Fay, managing editor of publishing house.

Emphasis on merchandising:

Merrick Litho Expands Into Book Publishing

MERRICK Lithography Co., Cleveland, O., has expanded its operations into the book publishing business with the organization of an affiliate, the Pennington Press, to handle editorial work and distribution. Printing is to be handled by the parent firm. Offices of Pennington Press have been opened in Chicago, with Robert B. Pennington, Jr., vice president and general manager of Merrick Litho, at its head.

At a luncheon, April 1, the new Chicago publishing house was welcomed to the city by Mayor Richard Daley and other civic and cultural leaders. Mr. Pennington said the new firm will begin with a list of 12 juvenile titles to be followed by books, both fiction and non-fiction, with adult appeal.

"While book publishing is a fiercely competitive field," he said, "there is no reason why a best selling book should not approximate the sales of a best selling recording, provided it is properly promoted." He plans, he said, to push his company's hard cover books by such means as billboards and subway car cards and will offer them in such places as super markets and drug stores.

"The easier the merchandise is to reach," he remarked, "the more it will be sold."

In 1948, Mr. Pennington began as a $50-a-week salesman for A. S. Gilman, Inc., in Cleveland, one of the

(*Continued on Page* 134)

Four-color billboards like this are being used by Pennington Press, new Chicago book publishing house, to promote its juvenile series in Chicago, Cleveland, San Francisco, Los Angeles and Boston.

THROUGH the GLASS

THAT old practical joke which involves sending the new boy in the office out for the paper stretcher may not be so funny anymore, because of a recent development at West Virginia Pulp and Paper Co. Westvaco has been displaying its new stretchable paper, called Kraftsman Clupak. ML had a look at the paper, and it really stretches, right before your eyes! Used to date mostly in natural kraft, for aniline and letterpress printing, stretchable paper has found a ready market in pliable bags for packaging cement, feed, fertilizer, sugar, chemicals and groceries, and has been tested in some 500 other types of materials.

If all goes well, we may be seeing Clupak in all sorts of uses—writing and printing papers, tissues, toweling, paper cups, disposable bedsheets, work aprons and such. It is described as break-resistant and shock absorbing.

How is the stretchable paper made? Simple, says Westvaco. A unit is installed as part of a standard paper making machine. A rubber blanket is supported on a nip roll, which compresses the rubber against a dryer drum. The moist paper enters the unit between the rubber blanket and dryer drum. The paper is held by the rubber blanket and stretched out by pressure from the nip. Once past the nip, the rubber blanket contracts to its original dimension and the paper shrinks.

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BUY OF THE MONTH: For just $1 a year, you can get important monthly figures on business conditions in the graphic arts. Horace Hart, director of the Printing and Publishing Industries Division of the U. S. Department of Commerce, tells ML that interested members of the industry now can get the reports, titled "Economic Summary, Printing and Publishing and Allied Industries," which were formerly quite restricted in circulation. Write to Printing and Publishing Industries Division, Business and Defense Services Administration, U. S. Department of Commerce, Washington 25, D. C.

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If your litho club hasn't done anything yet about the display being planned for the Graphic Arts Exposition in New York this September, better start the ball rolling. Dan Ford, of the New York club, last month sent out explicit details to all clubs, encouraging them to prepare a four- or six-page folder, 11 x 14" telling the story of the local club and how it contributes to the advance of the industry.

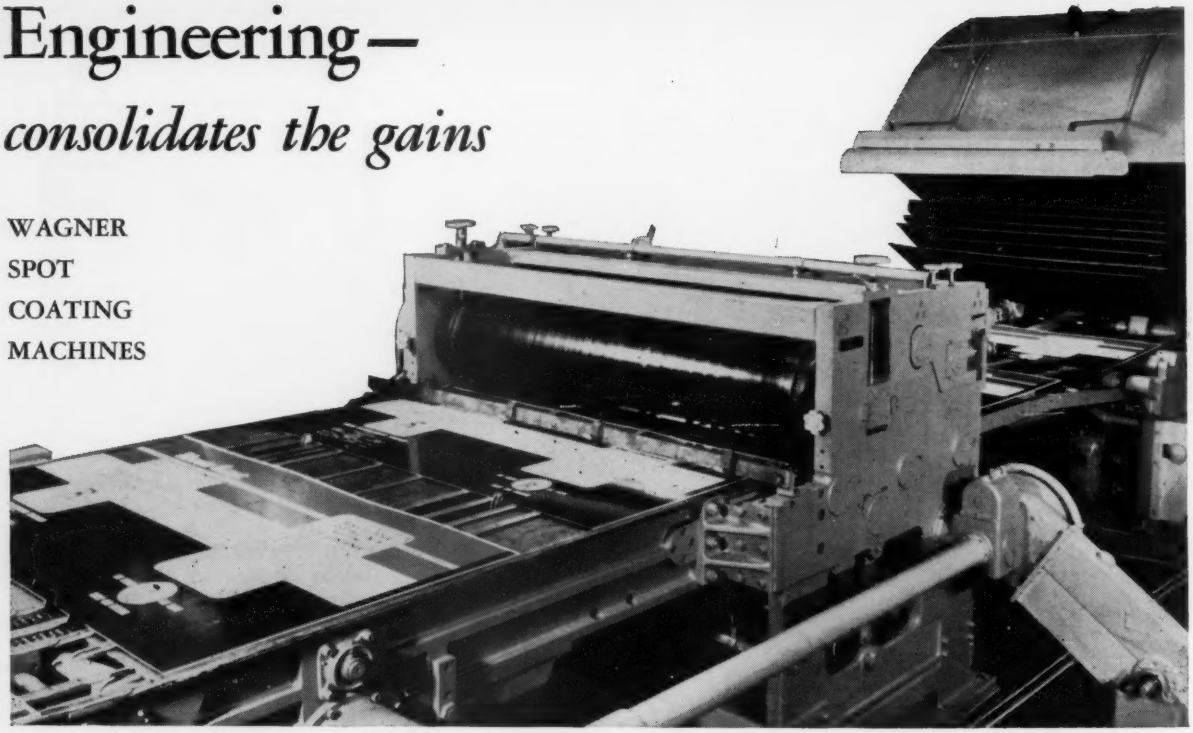
Getting in shape for the "Learn and Laff Luau" are Nelson Carnes, president of the Los Angeles Printing Sales Club (left), Pat Owens, of San Pedro, and Sam Rose, past president of the sales club. The Luau is the 6th annual Printing Sales Conference, sponsored by the club, June 13. Among the speakers on the schedule is William Walling, of Rogers-Kellogg Corp., New York.★

That guy doesn't know WHAT he wants!"

Engineering—

consolidates the gains

WAGNER
SPOT
COATING
MACHINES



To meet the present day needs of Metal Decorators — for larger sheets, greater speeds and more accurate registration — Wagner has developed the Lug Type Spot Coating Machine. Chains, with lugs, now convey the sheets from the automatic feeder to the coater and pre-position each sheet in exact relation to the registering fingers. "No Bumping — No Misses".

Three models, each including several different sizes, are now available.

The acceptance throughout the industry is proof of the demand.

If you are not getting the fullest productivity or finest quality; or if you are thinking about an addition to your production units, why not consult with Wagner Engineers? There is no obligation and we are glad to assist you.

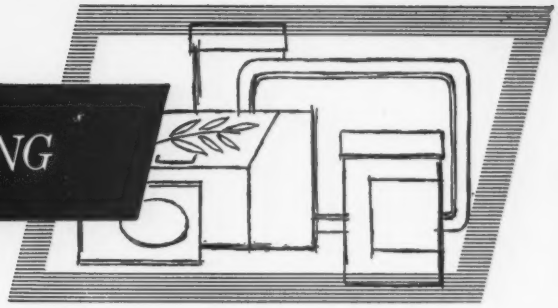
When thinking of Progress — think of Wagner!

WAGNER LITHO MACHINERY

Metal Decorating Machinery

555 Lincoln Avenue, Secaucus, N. J.

NS NATIONAL STANDARD Company Division



British Decorators Greet Tin Price Drop

A DROP in the price of tinplate has been welcomed recently by metal decorators in England. Ever since World War II a shortage of this essential material has hampered the decorators. Reports from England, however, now indicate that in 1958, for the first time since the war, tinplate was in plentiful supply.

This happy condition was reported recently by *The Financial Times* (London).

Users of metal containers, in turn, are enjoying lower prices for food and beer cans. The price of flat top beer cans now is lower than when they were introduced in 1954. The *Times* article stated that smaller size food cans now cost less than in 1955 and that the larger sizes are cheaper than in 1956.

Helping the tinplate situation to get into balance with demand of the decorators has been completion of a third giant strip mill in South Wales. Now the country has three modern cold-reduction mills with six electrolytic tinning lines.

Furthermore, the article goes on to say, quality of the newer tinplate is quite improved. "The production of tin boxes can now be planned with the assurance that the superior type of plate will be forthcoming. This opens the way to higher speeds, more consistent quality of work, a greater economy of materials and new advances in the design both of the processes of manufacture and of the products themselves."

Improved tinplate has caused a real boom in the beer business in England. In 1958 production of beer cans was double that for 1957. As an indication of this growth, the *Times* notes that, while only 20 to 30 different brews were canned in 1957, there now are more than 100.

The other product absorbing the improved tinplate has been detergents, according to the article. With better tinplate and finer lacquers, both beer and detergent cans can have the insulation between product and container that is so important.

Further, the better quality tinplate has enabled the redesign of paint cans, which now feature flush tops, which are more efficient and better looking. The larger sizes have a new style closure called a cushion ring and cap. The ring gives the cap resilience, which cushions it during entry. At the same time, it keeps the lid tightly in place once it has been pressed tight. The pressure of the ring relaxes gradually when the cap is removed, so that it comes away smoothly.

Increased use of plastics in conjunction with metal decorated cans is seen in the article. The use of plastic pouring spouts in the detergent cans is quite common, and the industry in England apparently feels this trend will continue, particularly with products which are not emptied as soon as they are opened.

Expanded use of aerosol products also has been a boon to metal decorators. These products may not be offered in quite the variety available in the U. S., but they are growing rapidly. In recent months pressure packed dental cream and a cold relief spray have come on the market.

All in all, British metal decorators seem to be optimistic about their future. Use of cans has been holding its own for such things as polishes, paints and tobacco. Even cigars are being packaged in metal boxes and aluminum tubes.

On the other hand, the sale of metal decorated boxes for cookies and candy has largely been restricted of late to the Christmas season.

Metal containers account for nearly one-quarter of the whole packaging industry in terms of value, and more than half of the tinplate used in this way goes into open top cans.

"For many purposes tinplate is the best and most versatile material," the article concludes, "and in the continued expansion of packaging, it still takes first place."★

•

Overprinter for Decorating

A device which makes it possible to imprint certain needed information on metal decorated cans has been developed in England. Called the Rejafix automatic overprinter, it is a unit which can, for example, imprint full details of color, kind and batch number on paint cans.

It is reported that the machine may be set to print accurately in the panel left clear for this information.

Toasting a Newcomer—First aluminum can designed for pressure-packed products is held by Carol Johnson, machine operator at American Can Co.'s Washington, N. J. plant. Cans shown here are receiving a base coat of enamel before the label is applied by metal decorating press. The seamless cans are formed by the extrusion process. After testing, they will be introduced commercially for dentifrice and other products.

after the container has been filled.

As cans coming from the filling and closing equipment are fed into the overprinter, a sensing device locates them so that the impression is correctly positioned. It is claimed that up to 1,500 cylindrical cans per hour can be printed by the machine.

The manufacturer is Rejafix Ltd., 81-83 Fulham High St., London, S.W. 6, England.

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Scholarships Offered

Von Hoffmann Press, Inc., St. Louis, is offering scholarships for high school and junior college graduates. The scholarships, for studies at Carnegie and Rochester Institutes of Technology, leading to a degree in printing management, are valued at up to $700 a year. The company said the awards would be made on the basis of above average scholarship achievement and evidence of financial need.

•

ALA Appoints Brown

Kenneth Brown has been appointed administrative asisstant to the president of the Amalgamted Lithographers of America.

Mr. Brown will take an active role in helping with contract negotiations of the union throughout the country. He has taken a leave of absence from his job as president of Local 12, Toronto.

NMDA Plans 25th

Planning well ahead to assure success for its fall meeting, the convention committee of the National Metal Decorators Association last month sent out its second mailing piece urging members to attend the 25th anniversary meeting of NMDA.

The convention is scheduled for the Roosevelt Hotel, in New Orleans, Oct. 12-14. The committee expects it to be the biggest ever held by the association.

Serving on the convention committee are Neal Rader, R. L. Singley, H. S. VanVleet, F. L. Campbell, and George R. Frank. NMDA officers — Harold W. Lee, president; William A. Westphal, vice president; and James G. Smith, secretary-treasurer, also are on the committee.

Inflation Discussed

Businessmen as well as unions are to blame for the wage-price spiral, in the opinion of Ralph D. Rosecrance, president of the J. L. Clark Mfg. Co., Rockford, Ill. Asked his views on national issues, Mr. Rosecrance emphatically declared that "businessmen have granted wage increases without regard to productivity and passed the increased costs to consumers."

He warned, also, that "We face financial catastrophe if something isn't done to curb government spending and inflation." The secretary of the treasury, he pointed out, is "having great difficulty" with the government debt financing program and "may have to ask Congress to raise the legal interest rate" to sell government bonds. The interview was one of a series in the *Tribune's* drive to arouse the nation to the dangers of inflation.

•

Sinclair & Valentine Affiliates

Sinclair and Valentine Co., New York, has announced its affiliation with Polycolor S. A. in France and Flesch y Cia in Chile.

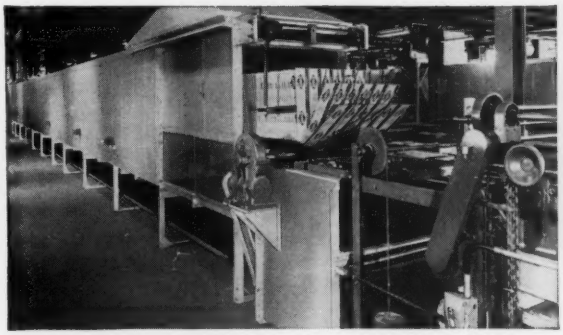
Both foreign firms will manufacture and distribute S & V's printing inks in their respective countries. The company now has affiliations in 15 foreign countries.

there's "something special" about every

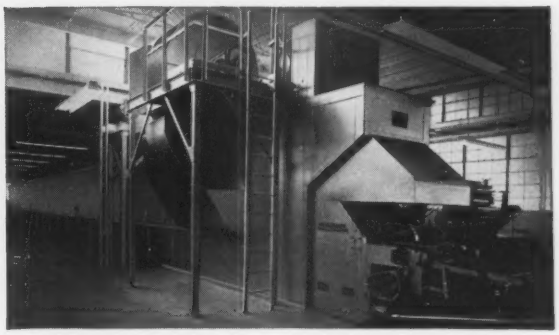
YOUNG BROTHERS
METAL DECORATING OVEN

it's engineered to meet individual production requirements for **SPEED, QUALITY, ECONOMY**

Battery of large, high speed D. E. F. Metal Decorating Ovens



D. I. F. Metal Decorating Oven with zone control and recuperative cooling



High speed, combination D. E. F. and D. I. F. Metal Decorating Oven

A metal decorating oven is a highly mechanized production unit in a specialized field — and it will only perform at maximum efficiency in your plant if it has been engineered and built by men well versed in every phase of oven engineering.

In Young Brothers Metal Decorating Ovens you get the experienced engineering and precision operation which are vital in producing high speed, high quality metal decorating. Young Brothers "know-how", based on 60 years of building individually designed ovens for all baking and drying processes, combined with a thorough knowledge of the Metal Decorating Industry is your assurance of better finished products at lower cost.

A wide variety of basic sizes and types of Young Brothers Metal Decorating Ovens are available to meet your specific requirements. Investigate what their advantages can mean to you — details are available without obligation. Write today!

YOUNG BROTHERS COMPANY

1839 COLUMBUS ROAD **CLEVELAND 13, OHIO**

ESTABLISHED YBCO 1896

New Equipment for Magnetic Check Imprinting:

IBM Series 1200 Sensing Equipment for handling magnetically imprinted checks.

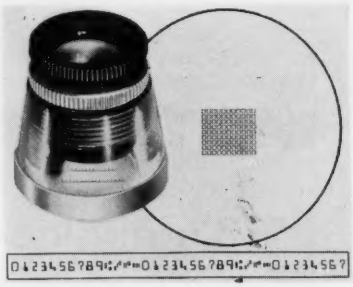
IBM Electronic 'Reader'

Electronic equipment which can "read" magnetic ink characters imprinted on paper checks and transmit the information instantly into data processing systems was demonstrated last month at IBM's Product Development Laboratory in Poughkeepsie, N. Y. The character-sensing equipment was shown to more than 500 bankers.

Checks written by individuals and businesses are automatically sorted by the new machines, called Series 1200 Character Sensing Equipment, at

(*Continued on Page* 152)

New Portable Comparator



A new, low-cost magnifier (or comparator) for use with magnetic check imprinting is available from the Edmund Scientific Co., Barrington, N. J. It is a 12-power magnifier with a wide, flat field, which magnifies a reticule or pattern etched on glass that is placed right on the work. The reticule was developed by the Industry Evaluation Committee. The Edmund magnifier was selected specifically for the job of checking faults or irregu-

(*Continued on Page* 152)

NCR Tests Checks

ELECTRONIC and printing specialists at The National Cash Register Co., Dayton, O., are busy testing batches of checks imprinted with the new "E-13-B" character shapes. NCR testing procedures follow specifications outlined in the American Bankers Association's booklet entitled "The Common Machine Language for Mechanized Check Handling." The NCR testing service is given without charge to banks, printers and equipment companies.

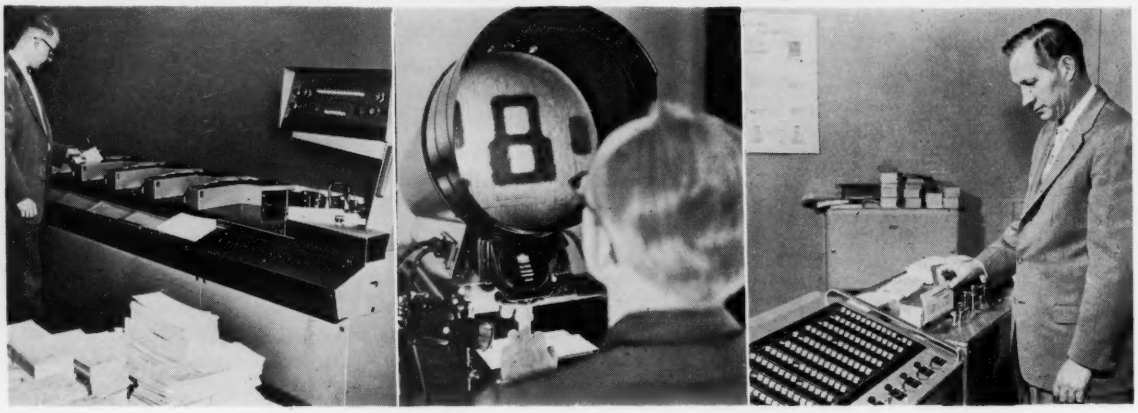
Even though individual banks may not be planning to install automatic check-handling equipment at this time, the ABA recommends that banks plan now to encode their checks. When this encoding is accomplished, it will open the way for increased services for all banks. It is important, NCR says, that banks analyze batches of checks to determine whether they meet the ABA's specifications.

NCR prepares a Magnetic Printing Evaluation Report on each batch of checks submitted. Testing follows a four-stage procedure:

1. A visual test of vertical and horizontal placement is made of random

(*Continued on Page* 133)

Three phases of NCR testing service: an over-all operational test (left) is made by automatically sorting the encoded checks on a Pitney-Bowes National Magnetic Character Sorter. Optical comparator (center) is used for measuring character and type dimensions, spacing, and other tolerances. Printing on check is enlarged 50 times when projected on screen. A machine called an "evaluator" (right) tests signal level and readability of 14 magnetic characters. If they are adequate, lights on the keyboard signal that fact.



4-color offset reproduction

WARREN'S *Lithographic* PAPERS

LUSTERKOTE • OFFSET ENAMEL • CAMEO BRILLIANT • OVERPRINT LABEL C1S
FOTOLITH ENAMEL • SILKOTE OFFSET • CASCO ENAMEL

This paper is Warren's OFFSET ENAMEL GLOSS; *basis* 25 x 38—100 (200M)

WARREN'S
Offset Enamel Gloss

Photograph by Creative Photographers, Inc.

This insert is a lithographed demonstration of WARREN'S OFFSET ENAMEL GLOSS, basis 100 (200M) — a double coated enamel paper designed especially for the reproduction of pictures by offset lithography. Double coating improves printability and uniformity, resulting in a higher potential of lithographic reproduction.

The four-color picture on the face of this insert shows how faithfully process color subjects may be reproduced on WARREN'S OFFSET ENAMEL GLOSS. The one-color picture shown at the left demonstrates the suitability of the paper for black-and-white halftone reproduction.

WARREN'S OFFSET ENAMEL GLOSS is available in basis weights 70, 80, 90, 100 and 120 — also in cover and cover-bristol weights. Consult your Warren merchant for items available from local stocks. Ask him also about the companion papers, WARREN'S OFFSET ENAMEL DULL and WARREN'S OFFSET ENAMEL-SAXONY FINISH.

PAPER MERCHANTS

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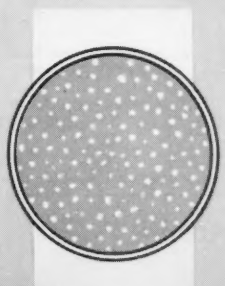

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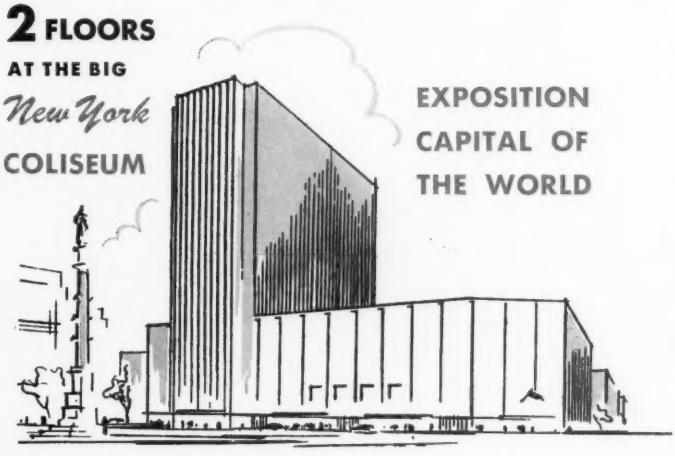

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LITHO CLUB NEWS

St. Louis

Memberships Are Up

Daniel Neumann, Western Printing & Litho Co., president of the St. Louis Litho Club, last month reported membership has increased to 86. Sixteen new members have joined since the beginning of the year. New members welcomed recently include: Joseph Renda, Von Hoffmann Press; Richard Smith, Paul Struckmeier, Wilbert Kiel, and Morris Moss, all of Western Printing & Litho. Co.; and William Willis, Chart Plant.

Beginning with the May 7 meeting, which was a closed business meeting, the club now is meeting at Mittinos Coachman Inn at 6:30 instead of at the Chip & Plank.

The club's five week platemaking clinic, held at David Ranken School, enjoyed an enrollment of more than 60. Attendance was so large that it was necessary to hold two separate sessions. The club plans another clinic in the fall on camera and production scheduling.

August 8 will be the date of the annual barbecue stag picnic at Tilles Park.

Canada

Brown Discusses Unionism

The Ontario Division of the Canadian Litho Club was host to Mr. Kenneth J. Brown of the Amalgamated Lithographers of America, at a recent meeting.

Mr. Brown spoke of the broad field of unionism in the industry today. He reviewed the significant changes that have taken place, particularly in the last fifteen years—the introduction of paid vacations, shorter hours, welfare and hospital plans and pension plans, all of which are national in scope.

Mr. Brown concluded his address by reviewing the present and past history of the jurisdictional dispute among graphic arts unions.

The Club president, Frank Johnson, announced the plans of the Annual Convention to be held at the Thousand Islands Club, Alexandria Bay, N. Y. from June 12 to 14th. The Ontario Division will be hosts to the Quebec Division. The theme of the convention will be Accent on Management. The speakers are Mr. Walter E. Soderstrom, executive vice president of the N.A.P.L. who will speak on "Your Future in Lithography" and Mr. Frank J. Turner, Jr., Cost Accountant of the N.A.P.L., who will speak on "Lithographic costs from the viewpoint of Sales, Production and Management."

Buffalo

Camera, Stripping, Platemaking

The May meeting of the Buffalo Litho Club was highlighted by a three part panel discussion. Camera problems were discussed by Victor Reisch, Sale Lithograph Co.; negative stripping by Alfred Meyers, Savage Litho Co.; and platemaking by Louis Gruber, F. N. Burt Co.

A question and answer period followed, with James Merson presiding.

Twin City

'Growing Places' At May Meeting

At its May meeting the Twin City Litho Club saw a film entitled "Growing Places," which depicted the growth of the Minnesota Mining and Manufacturing Co.

The film was introduced by Howard M. Burgh, advertising manager of 3M's graphic products group.

Edgar Engel and Norman Provian were welcomed as associate members.

Susquehanna Valley

"Power of Paper"

At Lancaster, Pa., the third meeting of a new litho club was held recently with over 100 members attending.

The members, many of whom are former Philadelphia Litho Club members, heard a short talk by Fred A. Fowler, 1st vice president of the NALC and watched a film on the "Miracle of Paper."

The first board of officers was elected; James Walsh, president; Benjamin Clerico, vice president; John Hyduke, treasurer and Peter Foley, secretary.

New York

Technical Panel for June

The Litho Club of New York will feature a panel program at its meeting June 24 at the Shelburne Hotel. The panel will consist of four well known men in the industry: John M. Lupo, Jr., camera; Harold Mueller, plate; Paul Whyzmuzis, ink and William J. Stevens, press.

•

New Plate Developments

Recent plate developments were discussed and demonstrated at the May meeting of the club.

Walter Coronetz, Harold M. Pitman Co., Chicago, explained and gave a demonstration of the Pitman S-T process of plate making.

Albert Materazzi, Litho Chemical and Supply Co., Lynbrook, N. Y., pointed out the need for tone control and the various conditions which affect control. Among the conditions he pointed out were those on the surface of the plate, the chemical and physical effects of the graining operations, and the effects of lighting conditions in the shop where plates are stored and processed.

Mr. Materazzi demonstrated a new coating process being developed by Litho Chemical and Supply, which is expected to have a much longer shelf life.

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These inks give excellent results on many other papers. They are exceptional and economical.

Chicago

Caring for Blankets

The Chicago Lithographers Club closed its current educational program May 28 with a discussion of "The Manufacture and Care of Offset Blankets." Guest speaker was R. R. Lewis, director of technical services of Vulcan Rubber Products, a division of Reeves Bros., New York.

At the meeting, the club also took action on revisions to its constitution and by-laws, as proposed by the board of governors. One broadens membership eligibility to include non-resident members (employed more than 50 miles from Chicago) and members-in-retirement, in addition to the previous active, associate and honorary classes. Dues of the two new classes were fixed at $2.50 a year. Another revision continues the practice of electing officers at the regular November meeting but provides for their installation at the December meeting, instead of in January as before.

Considerable time was devoted to plans for organizing a strong delegation to attend the approaching NALC convention in Minneapolis.

William Byers, entertainment committee chairman, announced plans for the club's first annual family picnic to be held June 27 on Lake Benedict, near Genoa City, Wis.

Washington

Public Printer Speaks

Raymond Blattenberger, Public Printer of the U. S., spoke to the Washington Litho Club at its monthly meeting held May 26. His topic was the general field of research and technology.

Robert A. Luciani, Haynes Lithograph Corp., spoke on "Practical Quality Control" at the April 28 meeting of the club. He pointed out that the most important items for quality control in their order of importance are cleanliness, coordination, and craftsmanship. Mr. Luciani stated that quality control is really standardization of operation not only in the shop but also with materials on the job.

He mentioned the need for lighting, temperature, humidity and color control. The use of a gray scale and a sensitivity guide as well as a densitometer are important to maintain quality control. He concluded with comments on the importance of good human relations.

Nearly an hour of questions and answers followed from the audience of 150.

Fred Fowler, past president of the club, inducted Richard Paetz of Sinclair & Valentine Co., and Donald E. Gourley, Capital Printing Ink Co., as new members and presented them with Senefelder lapel pins.

Baltimore

Colt Night

Weeb Ewbank, coach of the champion Baltimore Colts, was the speaker at the May 20 meeting of the Baltimore Litho Club. After the meeting a 50 minute film of the highlights of the championship season was shown.

The club's annual Crab Feast is planned for July 25, at Hasslinger's Restaurant. A Bull Roast will be held Sept. 26, at the Baltimore County Fish and Game Protective Association.

Walter E. Soderstrom, center, executive vice president of NAFL, addressed Miami Valley Lithographers Association, Cincinnati, last month. At left is Harry E. Brinkman, president of Cincinnati Lithographing Co.; William T. Stevenson, MVA president, is at right.

M.L.A.

Sales Management Problems

"Litho Sales Management Problems," was the topic in a speech given by Alfred Soman at the May 26 meeting of the Metropolitan Lithographers Association in New York.

The meeting was the final one of the Winter season of member meetings and special group discussion meetings.

A discussion period at the end of the program looked into some of the unusual conditions for which sales strategy must be determined.

Detroit

Hagedon on Key Register

James M. Hagedon, Harris-Seybold, Dayton division, presented the Harris Key Register System at the May meeting of the Detroit Litho Club, at which 141 members were present.

Harold Allmacher, Paragraph Lithographer Co., was welcomed as a new member of the club.

•

Web Offset Discussed

St. Louis Litho Club's June meeting will be devoted to the past, present and future advantages of web-offset printing. The meeting and dinner will be held at Mattinos Coachman's Inn, in Brentwood, Mo.

Two Clinics Held in Milwaukee

Two clinics were recently held in Milwaukee under the joint sponsorship of the Milwaukee-Racine Craftsmen Club, the Trade Composition Guild, the Vocational School and the production engineering committee of the Graphic Arts Association.

They dealt with the uses and production of the monotype system, and management engineering.

•

Mueller Color Film

The Mueller Color Plate Co., 2320 N. 11th St., Milwaukee, Wis., has produced a 16 mm. color film, describing, in detail, each step in the lithographic and gravure color reproduction process.

The film, entitled, "The Mueller Color Plate Story," is 25 minutes long and is available to graphic arts and educational groups.

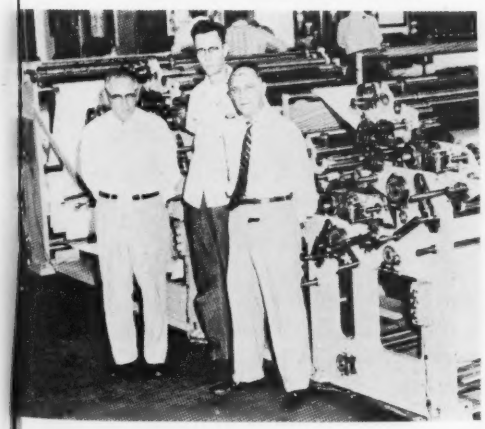
Houston

Four-Color Demonstration

Sixty members of the Houston Litho Club toured the Adco Press Inc., of that city, and watched a demonstration of four color press operation as the feature of the May meeting. Jarold and Kenneth Joseph, owners of Adco, and Richard Wyatt, pressman, explained the many problems which crop up in four-color operation during the course of the demonstration.

Instead of a formal meeting in June, the Club will hold a picnic, June 6 at the K. of C. Hall, Houston.

Hosts at Adco: Richard Wyatt, center, and Kenneth and Jarold Joseph, co-owners.



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Harold Biddle, 3308 Galbraith Rd.

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Raymond Gallagher

COLUMBUS
Ed Carter, 873 William St.

CONNECTICUT VALLEY
Irving Gross

DALLAS
A. G. Copeland, 3116 Commerce St.

DAYTON
Loomis Pugh, 1809 W. Columbia, Springfield, O.

DETROIT
Erhardt Toensfeldt, c/o Drake Ptg. Co., 2000 W. 8-Mile Rd., Ferndale

FORT WORTH
Paul Hansen, 5317 6th Ave.

GRAND RAPIDS
Joseph Stevens

HOUSTON
Grady Caldwell, Caldwell Ptg. Co., 407 M&M Bldg.

LOS ANGELES
Al Griffin, 520 Monterey Rd., Pasadena

MILWAUKEE
Jack Miller, 2572 N. 21 St.

NEW YORK
Ed Blank, 401 8th Ave.

OKLAHOMA CITY
J. Earl Hunter, 536 NW 48 St.

PHILADELPHIA
Joe Winterburg, 618 Race St.

PIEDMONT
Mrs. Jo W. Shaw, 502 Security Bank Bldg., High Point, N. C.

ROCHESTER
Ed Potter, 198 Weston Rd.

ST. LOUIS
Ray Eckles, 7023 Radom

SHREVEPORT
Roena Bradford, PO Box 397

SOUTH FLORIDA
Ken Miller, 13451 Alexandria Ave., Opa-Locka

TULSA
Mrs. M. K. Hare, 2521 So. Birmingham Place

TWIN CITY
Fred Schultz, Buckbee Mears Co., Toni Bldg., St. Paul

WASHINGTON
Art Nugent, 1130 S. Thomas St., Arlington, Va.

CENTRAL WISCONSIN
Bill Zimmerman, Rt. 2, Box 531, Menasha

Seen any of these Litho Enemies? The Southwest Litho Clinic committee has alerted lithographers everywhere to be on the lookout for the hoodlums shown above. If you have any information about their whereabouts, report to the Clinic June 19-21 at Dallas.

Southwest Litho Clinic

The Ninth Annual Southwest Litho Clinic will be held June 19-21 at the Adolphus Hotel, Dallas.

In addition to a technical clinic, the meeting will feature an exhibit of new equipment and processes, and a banquet and cocktail party.

Soderstrom Speaks to Craftsmen

Walter E. Soderstrom, executive vice president of the National Association of Photo-Lithographers, was a featured speaker at the spring meeting May 8-10, of 6th District Craftsmen, held at Nippersink Manor, Genoa City, Wis. Mr. Soderstrom's talk was on the topic "Looking Ahead in Lithography." With him was Frank Turner, cost accountant on the NAPL staff, who moderated a panel discussion of "Budgeting Hourly Costs in the Midwest Area."

Lithography predominated on the program with the following talks:

"Letterpress Conversion to Offset," by Clifford Jensen, Logan Square Typesetters; "Two Days and Two Ways to Color Reproduction," By S. T. Groet, Eastman Graphic Reproduction Center; "Modern Proofing Methods," By Martin Grayson, Printing Developments, Inc.; "Breaking the Profit Barrier," by Art Baker, Harris Alum-O-Lith Corp.

•

Southeast Litho Forum

A Greater Southeast Litho Technical Movie Forum, under the joint sponsorship of the Lithographic Technical Foundation and Printing Industry of Atlanta, Inc., has been scheduled for Nov. 13 and 14 at the Dinkler Plaza Hotel in Atlanta.

Plans have been made for one of the largest sectional litho forums ever held, with facilities for an expected registration of more than 500. The forum is open to any employe or executive of a plant in the southeastern states.

Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North and South Carolina, and Tennessee are the states whose printers and lithographers will be canvassed for the forum, but attendance is not restricted to printers from these states, it was emphasized. The forum is industry wide and representatives from many more states are anticipated.

There will be three sessions: Friday afternoon and Saturday morning and afternoon, with a luncheon.

Co-chairmen of the event are R. E. Damon and Mendal Segal, both of Atlanta.

•

Cowhig Named Foreman

William J. Cowhig has been appointed a litho press foreman at the Forbes Lithograph Manufacturing Co., Chelsea, Mass.

ALBERT GOMMI

CONTROLLED MOISTURE CONTENT

That's one of the secrets of the outstanding performance of All Purpose Litho on long high-speed press runs. *The* blue-ribbon paper for all of the major reproduction processes, All Purpose Litho is distortion free, lies flat, has consistent quality and superior ink receptivity. For labels, box wrap, pressure-sensitive and heat-seal applications and a wide variety of advertising uses.

THE CHAMPION PAPER AND FIBRE COMPANY, HAMILTON, OHIO

All-Purpose Litho

BY CHAMPION

Most tin cans are taken for granted — but not the new ones that hold the fine chemicals in the Lith-Kem-Ko line. A lot of thought was needed to bring this new can to market. It has several advantages that will make it a practical help to lithographers. »»» It has a dripless spout — you can pour just the right amount of chemical without wasting a drop. There will be nothing spilled over the outside of the can. That means it will be cleaner and easier to use. »»» The cap is tight to protect the contents from evaporation or change in consistency. »»» Its shape allows a firm grip and of course there is no chance of breakage if it is dropped. »»» Its design is clean and clear — the contents easily identified when stored among other chemicals. »»» This is just another step in the Lith-Kem-Ko search for better ways to serve the industry with better chemical products.

THESE LITH-KEM-KO CHEMICALS ARE NOW AVAILABLE IN THE NEW CAN.

LITHO CHEMICAL and SUPPLY CO., Inc.

MAIN OFFICE: 46 HARRIET PLACE, LYNBROOK, L. I., NEW YORK

4227 WEST 43rd ST., CHICAGO 32, ILL. • 1418-22 SANTA FE ST., LOS ANGELES 21, CAL.

RISING BOND
new
white
is
WHITER*
than
white!

* Whiter
than any other
quality white bond paper,
according to a
world-famous
testing laboratory

WHITENESS TESTS BY AN INDEPENDENT LABORATORY PROVE RISING'S NEW WHITE BOND BRIGHTEST...WHITEST

The evidence you can see with your own eyes... the unsurpassed brightness of Rising's new White Bond... is backed up by actual tests made in one of the United States' best known Independent Testing Laboratories. According to standards outlined in T.A.P.P.I. T-452M-48, "Brightness of Paper," samples of Rising's new White Bond are **outstandingly brighter** than those of other brands of nationally-advertised bright white bond papers of similar quality.

PERFECT UNIFORMITY...SHEET AFTER SHEET

Combined with extra bright whiteness, Rising's new White Bond assures you exceptional uniformity of the formation and cockle in every sheet... another reflection of the outstanding quality of "Fine Paper at Its Best!" These two important factors make it **doubly** important for you to specify Rising's new White Bond for the **brightest**... the **whitest**... in bright white bonds.

BRIGHT WHITE OR DELICATE PASTEL COLORS

Whether you prefer crisp, clean New White Bond or Rising Bond in smart, pastel colors, you get the same dependable assurance of uniformity... distinctive cockle, higher gloss, improved erasability... sheet after sheet, order after order. Rising Bond and Opaque Bond are available in the following weights and colors:

Substance 13	Substance 16	Substance 20	Substance 24
New White	New White	New White	New White
	New White Opaque	New White Opaque	New White Opaque
		Antique Ivory	Antique Ivory
		Aqua Blue	
		Dove Gray	
		Colonial Green	
		Petal Pink	

MATCHING ENVELOPES IN ABOVE WEIGHTS BY OLD COLONY ENVELOPE COMPANY

RISING BOND
new
white
is
WHITER*
than
white!

Made by the Mill that's famous for bright, **bright, Winsted Glo-Brite**

Rising

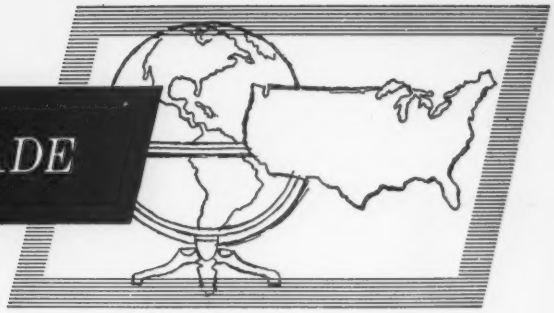
Makers of Rising Parchment (100% CF* Bond) • Rising Bond and Opaque Bond (25% CF) • Line Marque (25% CF Writing) • No. 1 Index (100% CF) • Hillsdale Wedding & Bristol (25% CF) • Platinum Paper & Bristol (25% CF) • Winsted Wedding & Bristol • Winsted Glo-Brite Vellum, Bristol, Text & Cover • And Technical Papers.

**Cotton Fiber*

RISING PAPER COMPANY
HOUSATONIC, MASSACHUSETTS

PRINTED ON RISING'S NEW WHITE BOND, SUBSTANCE 20

NEWS about the TRADE



Speroff Joins LPNA Staff

The Lithographers and Printers National Association has appointed Boris J. Speroff as director of industrial relations. He will also serve as

Boris J. Speroff

staff representative of the Litho Platemakers division. His office will be located at the Association's Mid-Western Branch office at 127 N. Dearborn St., Chicago.

Before joining LPNA, Mr. Speroff was on the faculty of the Industrial Relations Center, University of Chicago, where he had served as a consultant to management, in personnel and industrial relations, since August, 1952.

In 1958, he served with Advanced Management Research, a management consulting firm specializing in employe relations. He is author of 35 publications in this and allied fields.

•

Stern Advances Three

Edward Stern and Company, Inc., Philadelphia printers and lithographers, has appointed Edward Lineburger as offset superintendent and Charles Kriessman as letterpress superintent.

Mr. Lineburger has been in the graphic arts industry for 15 years and will be responsible for offset presswork and preparation.

Mr. Kriessman has been associated with all phases of printing for the past 44 years and will be responsible for composition, letterpress and bindery operations.

Mr. Eugene Vanaver has been named chief engineer.

•

Two Form New Firm

Harold Weiss and Norman Eisen have joined to form Neographic Process Co., in New York. It is an offset business which will serve the trade and general commercial accounts.

Mr. Eisen has had printing sales experience in New York and Mr. Weiss was formerly a foreman with J. Miller Printing Co.

The Neographic plant has two Webendorfer presses — a 22 x 29″ and a 17 x 22″ and platemaking facilities. The company occupies 1,800 square feet at 39 East 21st St.

•

Amalgamated Signs in Phila.

The Amalgamated Lithographers of America has signed a new contract with the Philadelphia Employers.

The contract provides for an overall pay increase of $7.50 per week to be paid between April 1, 1959 and April 1, 1960. In addition to a more liberal vacation policy, the employees will receive an additional one half day holiday on Christmas Eve. Furthermore there was an increase in health and welfare benefits.

Samuel D. Goller Dies

Samuel D. Goller, chairman of the board of Fine Arts Lithographing Co., of Kansas City, died May 10. He was 57. Mr. Goller had been ill about a

Samuel D. Goller

year and hospitalized since Thanksgiving day.

He was aso a partner in the Vile-Goller Printing Co. and Packaging Products, Inc., both of Kansas City.

Mr. Goller was a director of LTF and a former director of LPNA. He served as co-chairman of the Lithographic Technical Forum held in Kansas City in 1955. He was president of the PIA of Kansas City, and also served as chairman of the lithographic labor negotiating committee of Kansas City for several years.

•

Universal Leases Space

Universal Printing Co. has leased 38,000 square feet of floor space from McQuay-Morris Manufacturing Co., 3838 Market St., St. Louis. The space will be used for Universal Direct Mail Service, a division of the printing company.

TAGA Plans Full Program, Six Tours

PROGRESS has been so rapid and so regular in the graphic arts that it is difficult for technical men to keep up with it. The situation is illustrated quite pointedly in the program for the TAGA meeting this month in Rochester.

Frank Preucil

The Technical Association of the Graphic Arts will meet June 14-17 at the Hotel Manger, for its 11th annual conference.

In order to have time for six plant tours—always one of the most popular features of these meetings—it has been necessary for the program committee to schedule very full morning and afternoon sessions on Monday and Tuesday, and an evening session on Monday as well. Furthermore, just a half a day, Wednesday afternoon, has been allotted for the tours, the morning to be used for a final group of four papers.

Among the tours from which research men will make their choices are the following: Case-Hoyt Corp. (letterpress and offset), Eastman Kodak Co. (research laboratories), Burroughs Corp., Todd Division (sheet- and web-fed offset and letterpress), Rochester Institute of Technology, Haloid Xerox, Inc. (automatic Xerography), and Stecher-Traung Lithograph Corp. (large sheet-fed offset presses).

The program covers the usual gamut of research on technical problems of litho, letterpress and gravure. Elements involved in determining quality, factors affecting paper, evaluation of half-tones and several aspects of color reproduction are among the topics to be discussed. All in all, there are 25 papers on the advance program for the meeting.

Cyril N. Hoyler, manager of technical relations at RCA Laboratories, will be featured speaker at the annual banquet Tuesday evening. Frank M. Preucil, of LTF, is president of TAGA.★

ALA Loses Overtime Battle in Buffalo

A TRIAL examiner has ruled that Buffalo Local No. 2, Amalgamated Lithographers of America, violated the National Labor Relations Act by having its members refuse to perform overtime work for their employers.

In an intermediate report released by the regional office of the National Labor Relations Board, trial examiner C. W. Whittemore of Washington ordered the union to "cease and desist" from refusing to sanction overtime and to post a notice of compliance.

The original charge was filed by the Buffalo Employers Group, which bargains for 14 area printing and lithography shops. The group alleged that the union, after its contract expired, applied pressure for a new contract on the employers by refusing to work overtime.

The Board investigated the charge and issued a complaint against Local No. 2, alleging that the union failed to bargain in good faith. The hearing was conducted by Mr. Whittemore.

He said he based his conclusions on the findings in two other cases, one of which has since been overruled by the Court of Appeals and is scheduled to be decided by the U. S. Supreme Court.

George Luke, president of Local No. 2, said the union will not accept the findings of the trial examiner, and that the union's legal department will appeal his recommendation to the NLRB.

•

President of Tri-Arts Litho Dies

John E. Braun, 66, president of The Tri-Arts Lithography Co., Cleveland, died early in May at Cleveland Clinic Hospital.

Two Killed in Crash

Two executives of the Interchemical Corp., New York., were among those killed in the crash of a Capital Airlines plane, May 12, near Baltimore.

F. Jack Jueck, vice president, sales,

F. Jack Jueck

of the Printing Ink division, had been associated with the company for 33 years. He was made a division vice president in 1935. He served as Chicago factory manager and central district manager before moving to New York in 1956.

The other Interchemical officer who died in the crash was Maurice D. Cleary, director of industrial relations.

•

Install New Photo System

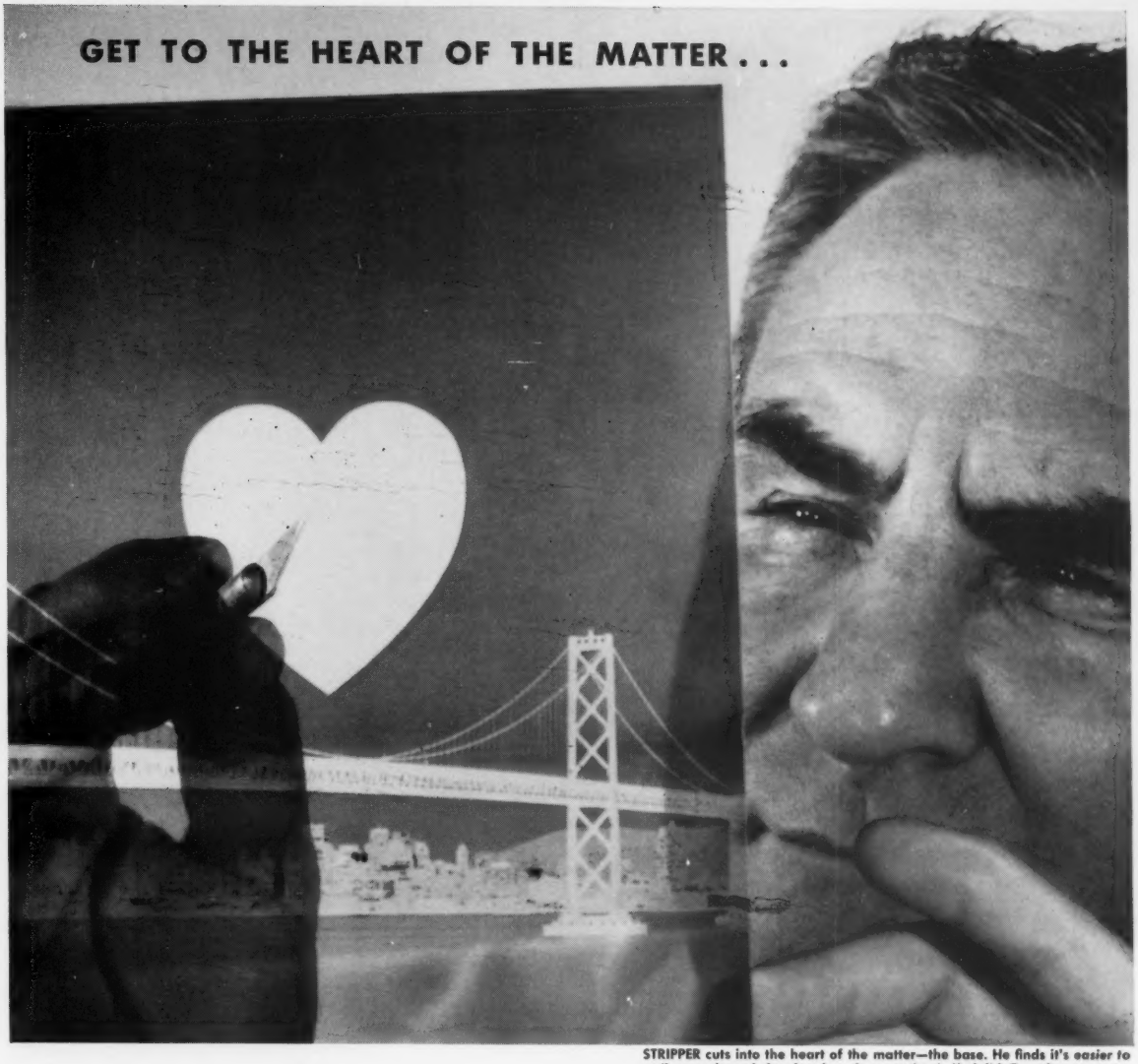
Smith and Setron Co., Cleveland lithographer, recently installed a complete photocomposition system at a cost of approximately $30,000.

The new system, developed by the Vari-Typer Corp., Newark, N. J., is the first in commercial use. A suburban telephone directory has already been produced with the system.

The process starts with sortable cards. These are similar to index cards and are approximately 10 inches wide to permit reproduction of nine tabular columns of material for catalogs. The names and phone numbers are printed on the cards by a line composer, an electric machine similar to a typewriter with right-hand justification.

The cards are fed automatically before the clicking shutter of a large, electronically operated camera. The camera costs about $20,000 and is the key to the system. One by one the names are photographed and produced in list form on rolls of film, 100 and 200 feet long, at the rate of 7,200 an hour. The film in turn is used in conventional plate-making processes.

The cards, which are stored 3,825



STRIPPER cuts into the heart of the matter—the base. He finds it's *easier to scribe evenly and cleanly* when the negative is Kodalith Type 3 on acetate.

New Type 3 Kodalith makes every job easier!

Easier work is faster work! That's why every job goes through the shop more smoothly when it's on new Kodalith Ortho Film, Type 3.

Strippers handle negatives more easily on acetate-base Type 3—get clean even scribing, straight scoring and breaking without special tools.

Cameramen get easier shooting of difficult copy, fewer makeovers—because of Type 3's wide latitude. *Every sheet is individually inspected.*

Dot etchers like it because the emulsion sticks to the base—dots etch uniformly through the entire scale.

Platemakers find it easier to print to metal. Stack up three or four Type 3 negatives and see the base clarity for yourself!

Managers, too, find this remarkable new emulsion makes it easier to meet day-to-day production schedules and keep costs within predictable limits.

Make your job easier! Use Kodalith Ortho Film, Type 3—on your choice of four supports: regular acetate, thin-base acetate, dimensionally stable P.B., and thick-base P.B., in all conventional sizes.

It's easy to begin! Complete printed how-to-use-it information is yours for the asking. Ready to help you, as always, are Kodak Technical Representatives, Graphic Reproduction Technical Service Centers, and your experienced Kodak dealer.

Order some "easy does it" Kodalith Ortho Film, Type 3, today. Or write us for an exposed and processed film sample, so you can put your glass on the heart of the matter for yourself.

Text for this advertisement was set photographically.

All Kodak graphic arts materials are made together to work together.

Graphic Reproduction Sales Division

EASTMAN KODAK COMPANY
Rochester 4, N. Y.

Kodak
TRADE MARK

Recorder Converts Press to Two-Color

Recorder Printing and Publishing Co., San Francisco, recently converted its Miehle 61 single color offset press to a two-color press. Shown in front of press are Emmett Carrol and R. A. Hansen, of Recorder, and J. Eddy, of the Miehle Co.

to a drawer, minimize storage problems. The use of the new equipment probably costs 30 to 50 percent less than ordinary typography on linotype machines and eliminates the expense of proofreaders, according to the company.

The system was tested for three years for lithography work in the Navy.

The system may be adapted to the production of catalogs, price lists, directories and other lists which must be reproduced and kept up to date.

•

New Bridgeport Litho Plant

Berdahl & Taylor Inc., lithographers, opened a new plant at 27 Keeler St., Bridgeport, Conn., early in May.

Principal officers of the corporation are Walker Taylor, president. and Walter Berdahl, secretary-treasurer.

Mr. Berdahl was formerly advertising manager of the Connor Engineering Corp., Bridgeport and Mr. Taylor has had more than 10 years experience in the photographic and chemical phases of lithography.

•

Mendle Absorbs Moss

Mendle Printing Co., St. Louis, last month announced the consolidation of Moss Printing Co. with it. Moss will operate as a separate division of Mendle, with Samuel Moss as president. The company will continue with its present executives and sales organization.

Thomas E. Dunwody Dies

Thomas E. Dunwody, 71, president of the International Pressmen and Assistants' Union, died early in May.

In addition to being president of

Dunwody

De Andrade

the union for many years, Mr. Dunwody had been editor of *The American Pressman* for 48 years. He was also editor and publisher of *The Specialty Worker*, a publication of the union.

He had been director of the union's employment service since its establishment in 1917.

Mr. Dunwody had been elected assistant president of the union in 1951, and president in 1952.

Anthony J. DeAndrade of Boston, Mass., was elected by the board of directors of the 112,000-member graphic arts labor organization to fill the vacancy resulting from the death of Mr. Dunwody. He will serve as president until a referendum can be held of the full membership.

Mr. DeAndrade has served as a vice president of the union since 1946. Prior to that he was a full time representative of the international union and a trustee of the Technical Trade School since 1931.

MLA Foreman Training

With a final session on May 19, a group of 21 foremen of member companies of the Metropolitan Lithographers Association, New York, completed a course in foreman management training given by Cornell University's New York State School of Industrial Relations.

The group included James Ferraro, George McGuire, Harold Dunkirk, Albert Steitz, Joseph Juliano, Edward Hoffmann, Cornelius Hofenwasser, J. Cargill, V. Walther, L. Storch, Louis Colasanti, Guy Sosik, Arthur Foti, Irving Weinstein, George Rentz, Harold Welsh, Ralph Aurichio, Thomas Incantalupo, Caesar Scotto, Joseph Kearny and Edward Soderlund.

MLA member companies represented were U. S. Printing and Lithograph, Industrial Litho, Multi Color Lithographers, New Era Litho, Neff Lithographing, Brett Litho, Metropolitan Plate Service, Einson-Freeman, Jersey City Printing, and Empire Color Lithographers.

The course was integrated to lithographic operations through the assistance of Charles Shapiro, educational director of the Lithographic Technical Foundation, and several member firms.

•

Two-Sided Offset Blanket

The first two-sided offset blanket for the printing industry has been developed by Goodyear Tire & Rubber Co.'s printers' supplies department at New Bedford, Mass.

According to the company, both sides of the new offset blanket are used alternately to cut fatigue and extend blanket life to one and one-half times normal. The price of the improved offset blanket is one-third higher than standard blankets. It is available in .065 and .075 gauges.

•

Hammermill Buys Beckett

Holders of 80 percent of the common stock of Beckett Paper Co., Hamilton, O., have accepted an offer of 112,750 shares of Hammermill Paper Co. common stock in exchange for Beckett stock.

The exchange was reported in the June 1 issue of the *New York Herald Tribune*.

Plan for Quality

This two-page insert is printed by offset on Cantine's Zenagloss Text 25 x 38 — 80 (160M). Conversion color plates by courtesy of General Telephone Corp. and Kudner Agency, Inc., New York. Inks by Pope & Gray.

to reproduce the finest photographic detail in **OFFSET**, *use...*

Cantine's

zenagloss

OFFSET COATED 2 sides

"PHOTOGRAPHS *are for detail"*

ZENAGLOSS

OFFSET TEXT C 2 S

BASIS	70	80	100
17½ x 22½	58	66	
19 x 25	70		
23 x 29	98	112	
23 x 35	118	136	
25 x 38	140	160	200
28 x 44	182	208	
35 x 45	232	266	
38 x 50	280	320	
42 x 58	360		

OFFSET COVER C 2 S

BASIS	60	80	100
20 x 26	120	160	200
23 x 35	186	248	310
26 x 40	240	320	400
35 x 46		496	620

Stocked by merchants everywhere

THE MARTIN CANTINE COMPANY
Saugerties, N. Y.
Specialists in Coated Papers since 1888.

Cantine's

This two-page insert is printed by offset on Cantine's Zenagloss Text 25 x 38 — 80 (160M). Photo by Frederic Lewis, New York. Inks by Pope & Gray.

One reason why offset printing has enjoyed its great growth in popularity is the fact that in Cantine's Zenagloss Offset (coated two sides), printers have found an easy, reliable, and economical Text and Cover Paper for reproducing *by offset the sharpest detail of photographic prints.*

Cantine's ZENAGLOSS Offset (coated 2 sides) has a water-resistant surface which is fully receptive to offset inks at high speed, and keeps pigment, gloss and varnish or lacquer from losing lustre or detail through penetration. Highly uniform. Ideal for short or long press runs. Ask for samples or dummies.

ZENAGLOSS

OFFSET COATED (2 SIDES)

Reilly Made Director

Gerald D. Reilly has been appointed director of commercial sales for Fitchburg Paper Co. Mr. Reilly joined the

Gerald D. Reilly

sales staff of Fitchburg Paper Company in 1953 and recently has been in charge of greeting card paper sales.

After graduating from Amherst College, Mr. Reilly worked for Newton Falls Paper Mills in both manufacturing and sales. He also worked for American Color Type Co., in New York. Prior to the Korean War, he was associated with the Army Quartermaster Corps Procurement Office as a civilian paper specialist.

Mr. Reilly is a member of the board of governors of the Young Lithographers Association of New York.

•

PIA Plans New Section

The board of directors of Printing Industry of America is establishing a special section to study the effects of business automation on printing markets, processes and products.

The organizational meeting of the section was held the week of May 25 in Chicago.

The temporary committee which has been studying the development of this section is under the chairmanship of Frank F. Pfeiffer, Reynolds and Reynolds Company, Dayton, Ohio. Mr. Pfeiffer is Chairman of PIA's committee on establishment of special groups. In opening the April 22 meeting, Chairman Pfeiffer stated that a national association has an obligation to give to its members as much information as possible regarding future developments, adequate information which will enable member companies to know how to process new developments and proper representation during the period of development of new processes.

The committee was in unanimous agreement that magnetic ink character recognition will become a universal language in business printing in relation to the future automation of business processes. Recognizing this to be a fact, the committee considered one of its first responsibilities would be to provide for PIA's many members an explanation of the steps which printing management must take to satisfactorily and economically print these magnetic ink characters for recognition purposes. The meeting proposed for the week of May 25 will devote major attention to clarifying and reconciling the wide divergence of opinion dealing with the difficulties of this type of magnetic ink printing.

The group which met on April 22 said that one of the most important aspects of business automation from the standpoint of the printing industry is to maintain a continuing study of the impact of this automation on printing markets, processes and products with particular emphasis on the need for working with office equipment manufacturers on the specifications for the printed products which will complement electronic and other machines used in business automation.

Those interested should contact PIA Headquarters, 5728 Connecticut Avenue, N.W., Washington 15, D. C.

•

Spectra '59 Planned

An added attraction for the graphic arts in New York this September will be "Spectra '59" — an exposition planned for the New York Trade Show Building, according to an announcement from Joseph Sugarman, exposition director.

While the new show will run concurrently with the Seventh Educational Graphic Arts Exposition in the Coliseum, Sept. 6-12, the latter group reports that it has no connection with Spectra '59 or any other show.

Three floors of the building have been set aside for the show, with many foreign countries scheduled to be represented, according to Mr. Sugarman.

Further details and a descriptive brochure are available from Internaational Graphic Arts Expositions, 330 W. 26th St., New York 1.

Blau Forms Ink Company

Murray L. Blau has announced the formation of the Mercury Printing Ink Corp., for the production and

Murray L. Blau

sale of lithographic and printing inks.

The new plant, located at 41 Dundee Ave., in Paterson, N. J., started production in April. The plant has an area of 11,000 square feet with storage, manufacturing and shipping facilities.

As president of the new firm, Mr. Blau will be assisted by Frank Wishy as vice president and William H. Humphreys as plant manager. Both Wishy and Humphreys were formerly with the William C. Herrick Ink Co.

Prior to opening the business, Mr. Blau was general manager of the Herrick Ink Co., with whom he had been associated for eight years.

•

LTF Annual Report

The Lithographic Technical Foundation last month published its 35th annual progress report.

The report pointed out that the 1958 program involved 347 thousand dollars not including rentals and equipment devaluation. It was further pointed out the 60 percent of the budget came from industry contributions, while income from investments and services amounted to 40 percent.

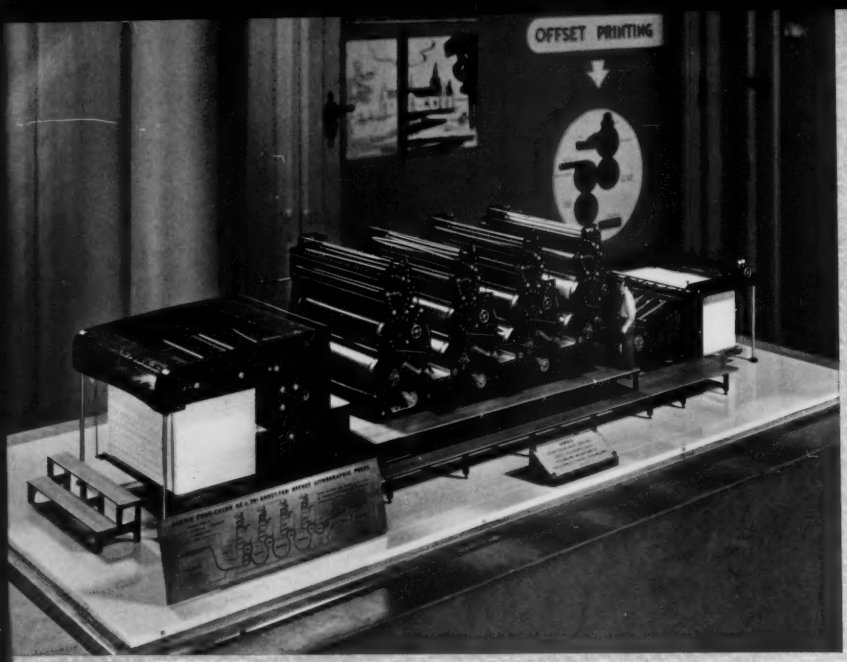
•

Bi-Craft Opens Plant

Bi-Craft Litho Inc., 1400 East 30th St., Cleveland, recently opened for business.

It was incorporated by John Crooks, who has sales experience in litho and photoengraving, and Emil Bialic, former secretary-treasurer of the Reliance Lithography Co. Plant foreman is Clifford Vick.

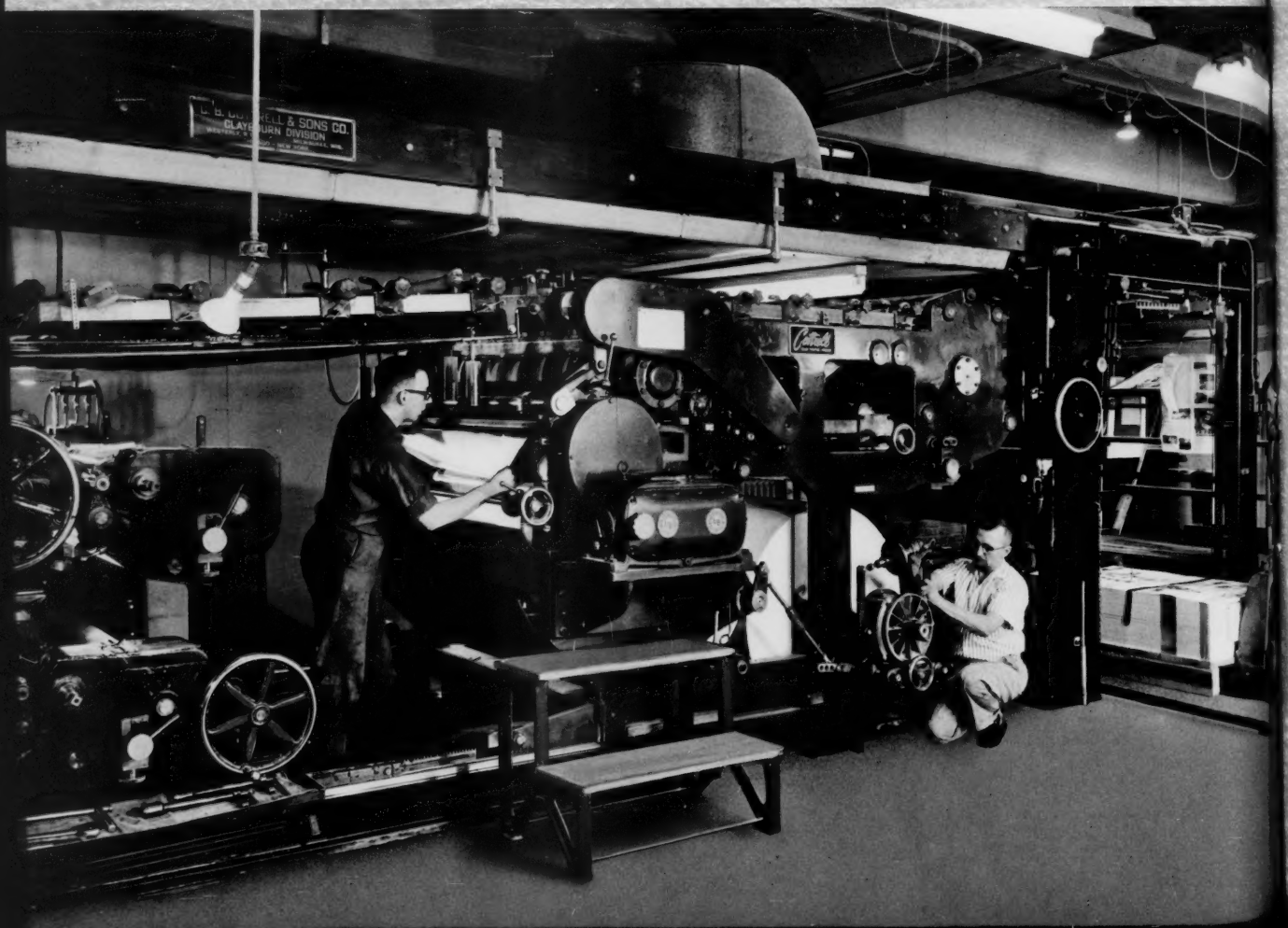
The company has press equipment up to 36 x 48″ size.



SMITHSONIAN INSTITUTION, Washington, D.C., has a scale model of a Harris 76″ four-color offset press. The model is one-twentieth actual size (34″ long and 8″ high) and is on display in the Graphic Arts Division.

What's going on at HARRIS I

CONVERTING SHEET-FED TO ROLL-FED PRESSES with the Cottrell Web-Feed Device holds interesting profit possibilities for printers. Applied to new or existing presses, this Cottrell unit saves paper cost, ups production. Shown below is the Web-Feed Device on a sheet-fed rotary at Kalmbach Publishing Company, Milwaukee.



REPETITIVE CUTS are speeded by the Auto-Spacer's automatic programming of this 100″ full hydraulic trimmer at The Northwestern Paper Company, Cloquet, Minn. This is their eighteenth Seybold and they have two more on order.

INTERTYPE

HARRIS INTERTYPE CORPORATION

HARRIS-INTERTYPE CORPORATION

General Offices: 55 Public Square, Cleveland 13, Ohio

Harris Presses • Intertype Typesetting Machines • Cottrell Presses • Seybold Cutters
Macey Collators • Harris Chemicals and Sensitized Plates • Gates Broadcasting Equipment

THESE ARE SOLID GOLD matrices, something you don't see every day. They were made to commemorate the ten-millionth Futura matrix made by our German affiliate, Intertype Setzmaschinen, GmbH, Berlin. The gold matrices were awarded to three Intertype machine operators from different countries in Europe.

HUSH-HUSH OPERATION helps track missiles down Cape Canaveral way. Our Gates Radio subsidiary built the equipment. It's a Doppler Velocity and Position Transmitter, and is known as DOVAP. Official USAF photo.

LITHO. IN U.S.A. ON A HARRIS OFFSET PRESS

Esquire Buys Big Goss Magazine Press

New magazine press: Esquire Inc., publishers of "Coronet" last month held open house to show off its new Goss letterpress unit. From left, C. S. Reilly, vice president of Goss; Arthur N. Knoll, president of W. F. Hall Printing Co.; John Maxwell, pressroom superintendent and John Smart, president of Esquire, Inc., and "Miss Coronet Press."

Government to Review Prices

The Graphic Arts Association of Washington, D. C., reports a pledge from Government Printing Office officials for review and revision of the prices in the recently issued Simplified Procurement Contract for Hot Metal Composition.

The revision and review will be made at the end of the current six-month contract and action is also promised on the contract for Offset Printing and Binding of Books and Pamphlets upon expiration of the current awards.

•

Majestic Appoints Pomerantz

Jerome Pomerantz has been appointed New York sales office manager for Majestic Press, Inc., Philadelphia.

Mr. Pomerantz has been a sales representative for the company for seven years, servicing the Philadelphia and New York areas. Prior to joining Majestic he had extensive background in the printing, advertising and newspaper fields.

•

New NYEPA Litho Green Book

A revised edition of the Lithographic Green Book of the New York Employing Printers Association was distributed last month to association members. The book contains hourly cost rates and production standards based on latest wage adjustments in the lithographic industry.

A new feature of the book is a chart of paper thickness, indicating which papers should be figured at extra time for running and cutting.

•

ATF Appoints Two

Carl A. Nelson has been appointed manager of the Philadelphia branch of American Type Founders Co., Elizabeth, N. J. He will supervise the promotion, sale and servicing of ATF's line of graphic arts products.

Hourihan Nelson

William P. Hourihan has been appointed branch manager for ATF in Boston.

•

MARK A. SILEGY of Stamford, Conn., has been appointed general sales manager for Monadock Paper Mills, Inc., Bennington, N. H.

Law Co. Buys Litho Stock

The Robert O. Law Co., Chicago book manufacturer, announced in May, it has acquired a substantial interest in the Veritone Company, lithographers. The stock acquisition was made in order to provide the company with a complete lithographic service.

Robert Stafford, president of Law Co., said, "the decision to purchase this interest was made because of Veritone's recognized skills and techniques in black-and-white and color lithography. Through this arrangement, we are able to offer the latest developments in quality lithography."

A joint announcement by Stafford and Vernon K. Evans, Veritone president, said Veritone will continue as an independent manufacturing entity, serving its own clients as well as those of Law.

Mr. Evans and James A. Collins, vice president, will be joined on Veritone's board of directors by Mr. Stafford, who has been named treasurer of the company, and Joseph F. Wesol, secretary.

Veritone will continue operations in its present location at 2701 North Lehmann Court, Chicago. In addition, it will initiate an expansion program early this summer by installing a web-offset department in Melrose Park, Ill.

•

Davidson Check Imprinter

A check imprinting machine for magnetic sorting is being produced by the Davidson Corp., a subsidiary of Mergenthaler Linotype Corp., Brooklyn. Called the Tandem Dual-Lith, the press prints the format of the checks and the stubs, personalized and coded, with a check reorder form. It can carry out all the necessary serial numbering and perforating operations in one pass through the machine, according to the company.

The setup of the machine enables the operator to use an IBM electric typewriter equipped with a font of special type developed for the magnetic ink encoding program, and to type the name and address of the depositor on the first of the two lithographic paper masters, and the code on the other.

RICHFIELD

western wild flower book

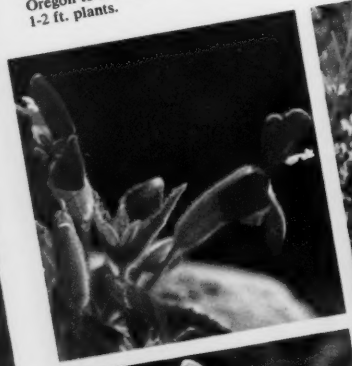
What

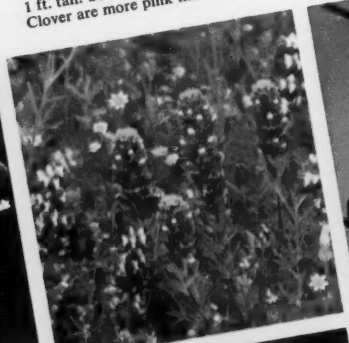
CRIMSON MONKEY FLOWER
Mimulus cardinalis
From March or April through summer along streams in foothills from Oregon to Arizona. 1" flowers on 1-2 ft. plants.

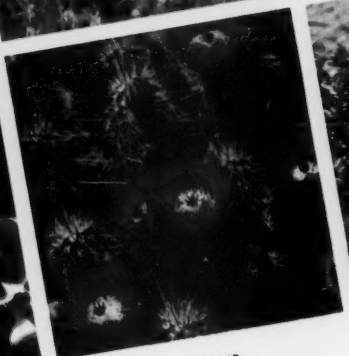
OWL'S CLOVER
Orthocarpus purpurascens
3-4" flower heads appear in April and May on plants about 1 ft. tall. Some kinds of Owl's Clover are more pink than red.

WESTERN REDBUD
Cercis occidentalis
One of the most beautiful flowering shrubs of the California foothills. Spikes of ⅓" flowers on 8-15 ft. shrubs in April.

FIREWEED
Epilobium angustifolium
Northwest and Sierra Nevada. Spikes of ½" flowers all summer on 2-10 ft. plants. Common in burned-over areas.







CHAPARRAL PEA
Pickeringia montana
Stiff spiny shrubs 2-5 ft. tall, forming impenetrable thickets in the California chaparral. Flowers ¾" long appear in May and June.

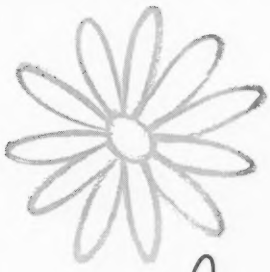
HEDGEHOG CACTUS
Echinocereus fendleri
Stems to 6" high resemble spiny cucumbers. The first cactus to bloom in the spring, with 3" flowers. Fruits edible. Arizona. March-April.

FOUR O'CLOCK
Mirabilis froebelii
Common in the deserts. Low, sprawling growth; single plants may spread as much as six feet. 1½" flowers May to July.

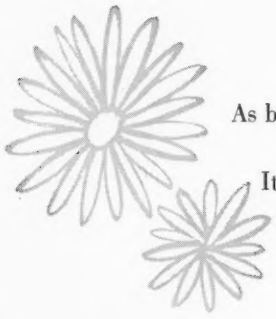
INDIAN PINK
Silene californica
These bright flowers splash vermillion on the forest floor from California to Oregon. The plants are 1 ft. tall with flowers 1" across. May-July.

oughout the West.
ll, with delicate
across in May

This insert is lithographed on
Sterling Offset Enamel
25 x 38-80



makes these flowers bloom?

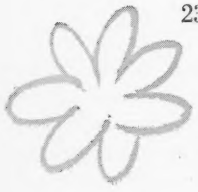


As bright as all outdoors, this flower book was lithographed on West Virginia's Sterling Offset Enamel. It attracts readers as only a truly superior print job can.

The remarkable whiteness and gloss of Sterling cleanly reflect light back to the eye and convey the valued impression of top quality.

Another reason for the lithographer's choice of Sterling Offset Enamel is recognized printability. It is an excellent, stable paper that assures smooth, high-speed press performance and close register.

The West Virginia family of fine papers gives you unusual quality and economy for your printing jobs. Add to this the benefits of West Virginia's direct mill-to-you sales policy and service. For full details write to West Virginia Pulp and Paper Company, 230 Park Avenue, New York 17, N.Y., or contact an office listed below.



Richfield's "Wild Flower Book" printed by the Pacific Press in Los Angeles, is lithographed on 70# Sterling Offset Enamel. The sheet size was 42 x 58, and the job was run on four- and five-color Miehle presses. For a personal copy, just ask your nearest West Virginia Office.

Fine Papers Division
Commercial Printing Paper Sales

Chicago 1 / FR 2-7620
Cincinnati 12 / RE 1-6350
Detroit 35 / DI 1-5522
New York 17 / MU 6-8400
Philadelphia 7 / LO 8-3680
Pittsburgh 19 / CO 1-6660
San Francisco 5 / GA 1-5104

West Virginia Pulp and Paper

Web-Offset Owners Air Problems

Twenty users of Hantscho web-offset presses and 18 other persons were breakfast guests of the George Hantscho Co., Inc. at the PIA Web-Offset meeting in Dayton April 24. The informal get-together was the idea of E. G. Ryan, vice president of the company, who is seated at far right in the photo.

SHOP talk about web-offset presses was the order of the morning at a special breakfast sponsored by the George Hantscho Co., Inc., Mt. Vernon, N. Y., April 24 at the PIA Web-Offset section meeting in Dayton, O.

Twenty users of Hantscho presses and 18 others were present at the informal breakfast, which was planned by E. G. Ryan, vice president of Hantscho. Those attending included:

Carl Eisentraut, Manz Corp., Chicago; Harold E. Spear, Kenneth R. Whitney and DeWitt C. Peets, all of Daily Journal of Commerce, Portland, Ore.; Olaf H. Boettcher and Walter J. Wildermuth, both Concordia Publishing Co., St. Louis; George J. Luehrs and William F. Drawbaugh, both Peerless Litho Co., Chicago; A. J. Allegrettic, Cuneo Press, Chicago; Irving S. Siegel and William Steinke, both Mercury Litho., Brooklyn; W. R. Bean II, W. R. Bean & Son, Atlanta; H. V. Plunkett, Plunkett & Brandt, Dayton; K. A. Manchen and Clark Q. Snyder, both E. G. Ryan Co., Chicago; Paul D. Cooper, Heer Printing Co., Columbus, O.; Eugene Strauss, Commerce Clearing House, Chicago; Charles D. Winters, Standard Rate & Data, Chicago.

Also A. C. Murray, Murray Printing Co., Forge Village, Massachusetts; E. C. Chalifoux, Photopress, Chicago; A. W. Brooks, Deere & Co., Moline, Ill.; Robert Everett and Charles Bookwalter, both Bookwalter Co., Indianapolis; Ben Offen, B. Offen & Co., Chicago; J. A. Doty, Neely Printing Co., Chicago; Robert Lee, Bowers Printing Ink Co., Chicago; Raymond Langford, Carl Denmanand, Claude Oberlin, all Spartan Publishing Co., Sparta, Ill.; Roy J. Miller, Butler Bros., Chicago; Lloyd Neely, Neely Printing Co., Chicago; E. B. Parks and William Bold, both Rand McNally & Co., Skokie, Ill.; R. A. Carpenter, Carpenter Litho Co., Springfield, O.; and John Wurst, John Wurst Inc., N. Kansas City, Kan.

Representing Hantscho at the breakfast, in addition to Mr. Ryan, was E. H. Kling.

Grogan Joins Telegraph Press

George C. Grogan has been named manager of sales and advertising for The Telegraph Press, Harrisburg, Pa.

Mr. Grogan was formerly with printing companies in Huntington, W. Va., Philadelphia, and Dayton, as a salesman and sales executive.

•

SPSE Fall Conference

The Society of Photographic Scientists and Engineers will hold its 1959 national meeting at the Edgewater Beach Hotel in Chicago, Oct. 20-30.

There will be a major display of photographic and electronic equipment by leading manufacturers.

•

GRADY GRANT, 55, of Houston, died suddenly last month. He was employed by E. C. Palmer & Co., Houston and was a member of the Houston Litho Club.

NAPIM Will Exhibit

The National Association of Printing Ink Makers will exhibit more than 20 instruments and gauges used in research and quality control in the production of ink, at the Graphic Arts Exposition, in New York, Sept. 6-12.

•

Walker Dealer for Heidelberg

E. H. Walker Supply Company, Inc., Washington and Richmond Graphic Arts suppliers, have been appointed exclusive dealers for the sale of Heidelberg automatic platen and cylinder presses for Washington and the state of Virginia.

•

New President At Macbeth

Iredell Eachus, Sr., has retired as president of Macbeth Arc Lamp Co., Philadelphia, and his son, Iredell Eachus, Jr., has been elected to succeed him.

Iredell Eachus Sr. (l) and son.

In announcing the change, the senior Mr. Eachus, who will continue as chairman of the board, said, "Macbeth celebrates its Golden Anniversary in June. . . . We plan to expand the Macbeth line with completely new . . . lighting equipment for the graphic arts and reproduction industries. This is the right time, I feel, for my son to take over active management of our company."

Mr. Eachus, Jr., has been chief engineer with Macbeth since his discharge from the Navy after the Second World War. He is an engineering graduate from the University of Pennsylvania.

Big Promotion Drums Up Sales For You!

Join the big parade to Fluoro . . . backed up by a hard-hitting advertising campaign in leading advertising and artist publications. Long-recognized as the most practical, economical method for producing superior quality, automatic drop-out halftones, the Fluorographic process is now used by 375 of the leading lithographers and photoengravers in the U.S. and Canada.

And now . . . FLUORO-COLOR, a spectacular new process for making live, brilliant, high-fidelity, *full-color* halftones from pre-separated Fluorographic art at a fraction of normal costs.

The many advantages, incomparable quality and remarkable savings in time and cost of both Fluoro-Color and Black & White Fluoro will be emphasized in the advertising. Besides, the names of all lithographers licensed to use Fluoro will be listed periodically... resulting in additional business for Fluoro-licensed plants.

This is new, profitable business you can't afford to miss. Write for complete information today.

Fluoro GRAPHIC

FLUOROGRAPHIC SALES DIVISION
PRINTING ARTS RESEARCH LABORATORIES INC.

La Arcada Building • Santa Barbara, California

PRINTING ARTS RESEARCH LABORATORIES, INC.
Fluorographic Sales Div., Dept. ML
La Arcada Bldg., Santa Barbara, Calif.
Send complete info. on Fluorographic.

Name_____
Firm_____
Address_____
City_____ Zone____ State_____

Morris Joins Marquardt

Charles V. Morris, widely known graphic arts writer and speaker, has

Charles V. Morris

joined Marquardt & Co., in New York as director of sales and advertising. He had formerly been associated with J. B. Card & Paper Co., in Newark. Mr. Morris is a member of many graphic arts groups and has been associated with the industry for 30 years.

•

New Directors Elected

At a recent meeting of the board of directors of the New York Printers and Bookbinders Mutual Insurance Co., Frederick W. Schmidt was elected president, H. Wayne Oakley, executive vice president and Frederick W. Behr, Jr., secretary and counsel.

•

Admitted to GAA

Ad-Print Screen Process, Inc., has been admitted to active membership in the Graphic Arts Association. Raymond J. Pitcsh is president. GAA now has a total of 120 firms in their membership. 88 active members and 32 associates.

•

Brown & Bigelow Report

At its annual stockholders' meeting in May, Brown & Bigelow, Inc., St. Paul, Minn., reported that sales volume would be at least equal to last year's.

Directors voted the regular quarterly dividend of 25 cents on 1,263,645 outstanding shares. The dividend was paid June 12 to stockholders of record May 22. It is the 46th consecutive dividend since the company became publicly owned in 1947.

Japanese Visitor

Masumi Eda, executive of a Japanese printing equipment manufacturer, was in Chicago last month to observe production of magazines by R. R. Donnelley & Sons Co., and other big publication printers there. Eda is managing director of Tokyo Kikai Seisakusho, one of the leading Japanese makers of high speed presses. He expressed great admiration for the high productivity of American presses. Earlier he had toured Europe and spent some time in New York. After visiting west coast printers he left for home from San Francisco on May 20.

Whiting-Plover Awards

The Whiting-Plover Paper Co., Stevens Point, Wis., has announced 12 award winning letterheads in its

third annual nationwide competition. Letterhead winners were selected on the basis of design and reproduction.

The 12 winners and the 12 paper salesmen who submitted the winning letterheads will receive Golden Plover trophies. In addition, grand award certificates will be given to the companies whose letterheads were judged the best.

Monthly awards were also presented throughout 1958. Previously, winners were selected only once a year. Under the new system, letterheads are judged for cash awards the month they are received and again at the end of the year for the grand awards.

Broadston Joins Dahlgren

Theodore M. Broadston has been appointed vice president in charge of

Theodore M. Broadston

sales for Dahlgren Mfg. Co., Dallas, Texas.

Mr. Broadston will create a sales service organization for the company and will coordinate engineering and manufacturing facilities with it.

He was formerly with Harris-Seybold Co., which whom he served as eastern sales manager and New York district manager for ten years.

•

Nolan Named H-S Manager

Kenneth J. Nolan has been appointed New York district manager for the Harris-Seybold division of Harris-Intertype Corp., according to a company spokesman. Mr. Nolan, who had been assistant district manager, replaces T. M. Broadston, who resigned to become vice president of the Dahlgren Manufacturing Co., Dallas.

Mr. Nolan has been with the Harris-Seybold sales department since 1950 and has held a variety of assignments in the company's Philadelphia, Washington and New York offices.

•

Leinbach Elected to Riegel Post

Frederick S. Leinbach has been elected president of the Riegel Paper Co., New York.

Mr. Leinbach had been executive vice president of the company since 1957. He joined the company in 1934 as a chemical engineer for production development. He is also a member of the board of governors of the American Paper and Pulp Association.

COLOR PHOTO BY ANTON BRUEHL

"Are you sure you're not sending a boy?"

A LETTERHEAD intended to do a man's work should look the part—yet how many cross your desk that appear to be business "orphans"?

Look to your letterhead. Does it reflect the nature, the stature, the personality of your business? Look at the bond on which it's printed. Does it have the whiteness, the strength, the feel, the finish of HOWARD BOND?

It's the combination of a good letterhead design and HOWARD BOND that creates letterheads of distinction, and business correspondence that will be respected and successful in a discriminating world.

Ask your printer or paper merchant to show you HOWARD BOND—in whitest white—and in an attractive array of colors and finishes.

PRINTERS! *This message appears in advertising magazines read by your customers.*

HOWARD PAPER MILLS, INC. • HOWARD PAPER COMPANY DIVISION, URBANA, OHIO

Howard Bond

"The Nation's Business Paper"

Companion Lines: **Howard Ledger • Howard Mimeograph Howard Duplicator • Howard Posting Ledger**

Printed on Maxwell Offset *Basis 80—Wove Finish*

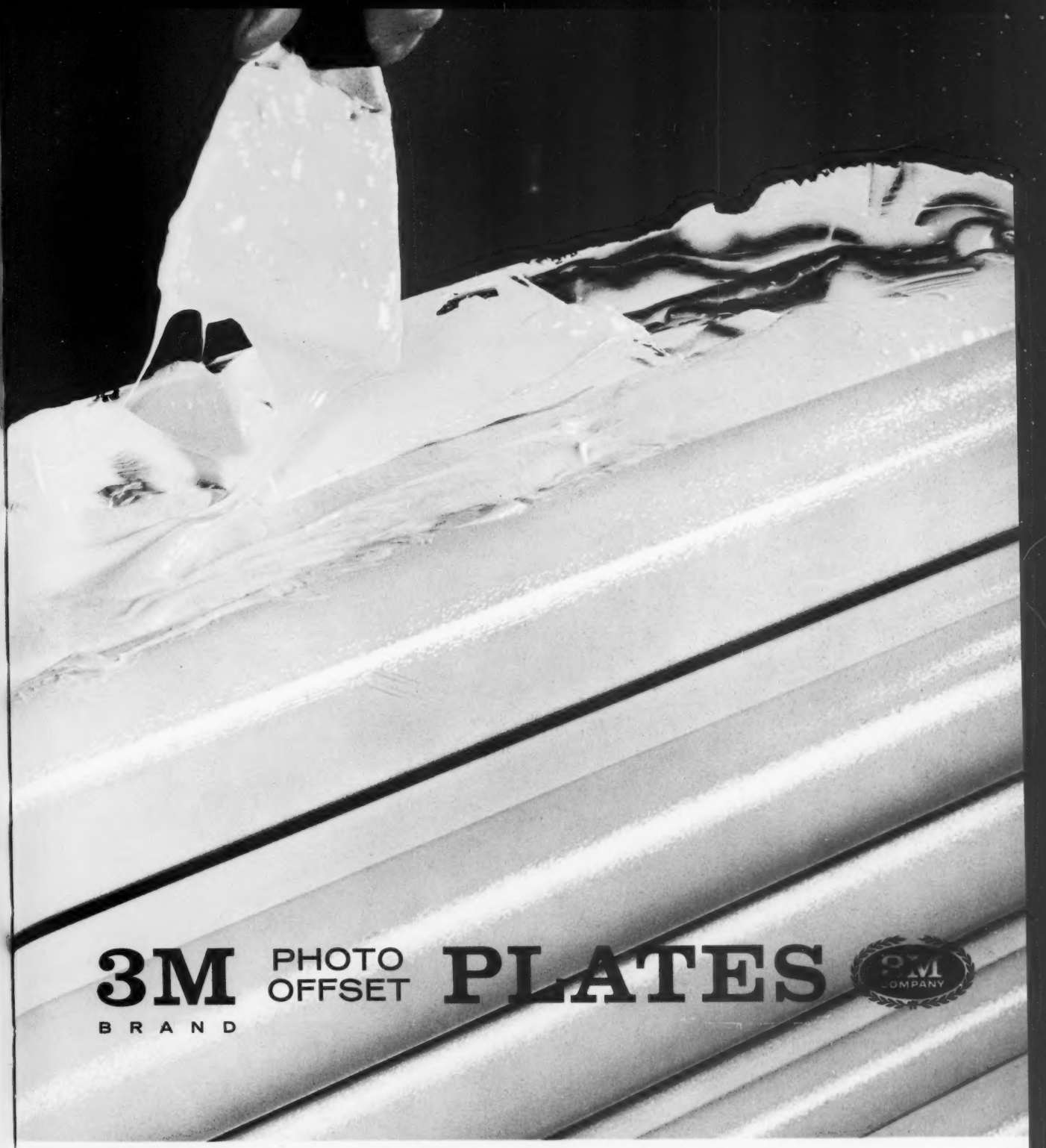
Printed on Maxwell Offset—Basis 80—Wove Finish

Discoveries in American Art

. . . on Maxwell Offset

The painting, "Fisherman", is the work of Ray Prohaska, distinguished President of the Society of Illustrators. Heretofore unpublished, it is considered by the artist to be one of his best works. This reproduction, reduced to one-fifth the size of the original, attests the excellence of the separation positives and lithography . . . and the fact that color *does* reproduce better on *Maxwell Offset*. Try it yourself!

HOWARD PAPER MILLS, Inc. • *Maxwell Paper Company Division* • Franklin, Ohio



PROOF: **Quality lithography depends on the plate**

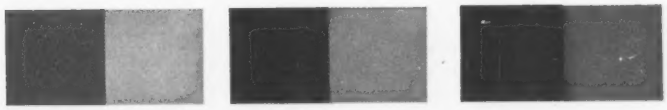


Plate costs are only 1¢
of your litho dollar

. . . so buy the best

Vivid color reproduction... no toning! no scumming!

With 3M Brand Photo Offset Plates on the press you get consistently brilliant results—like those shown by the 4-color illustration on the preceding page. Rich solids, sparkling highlights, finest details—all reproduce faithfully with no trace of scum or tone.

This performance is standard on every job. That's because these flawlessly-smooth aluminum plates are chemically treated under precise conditions and control. With this completely standard uniformity from plate to plate, ink and water balance is easy to get and to maintain.

You'll want this quality and dependability working for you. So call your supplier now. He'll gladly demonstrate the many ways 3M Brand Photo Offset Plates add quality and profit to your jobs.

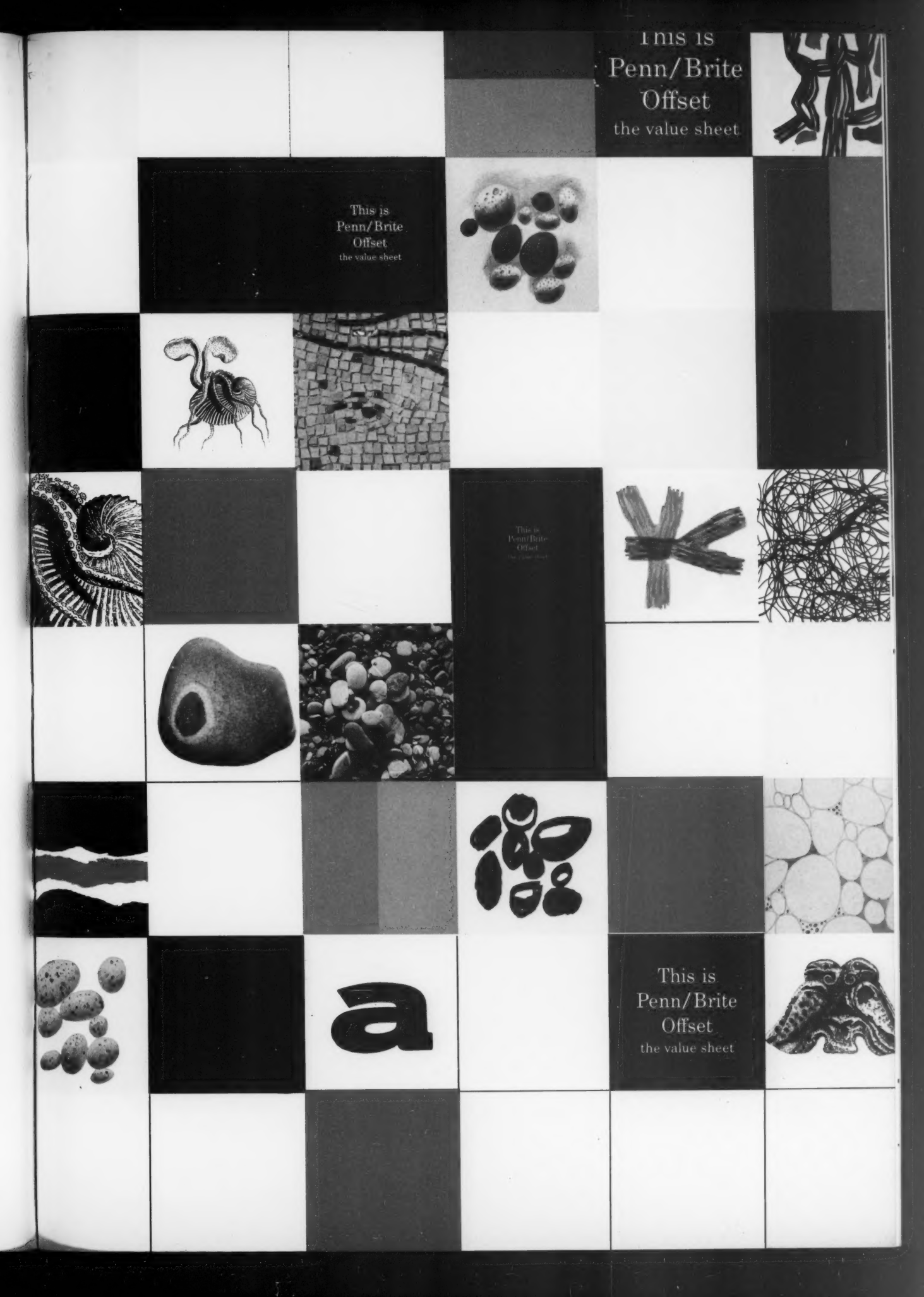
Dependability wears a 3M label.

3M
BRAND
Photo Offset Plates

MINNESOTA MINING AND MANUFACTURING COMPANY
. . . WHERE RESEARCH IS THE KEY TO TOMORROW

3M COMPANY

"3M" is a registered trademark of Minnesota Mining and Manufacturing Company, Saint Paul 6, Minnesota. General Export: 99 Park Avenue, New York 16, New York. In Canada: P. O. Box 757, London, Ontario.


This is
Penn/Brite
Offset
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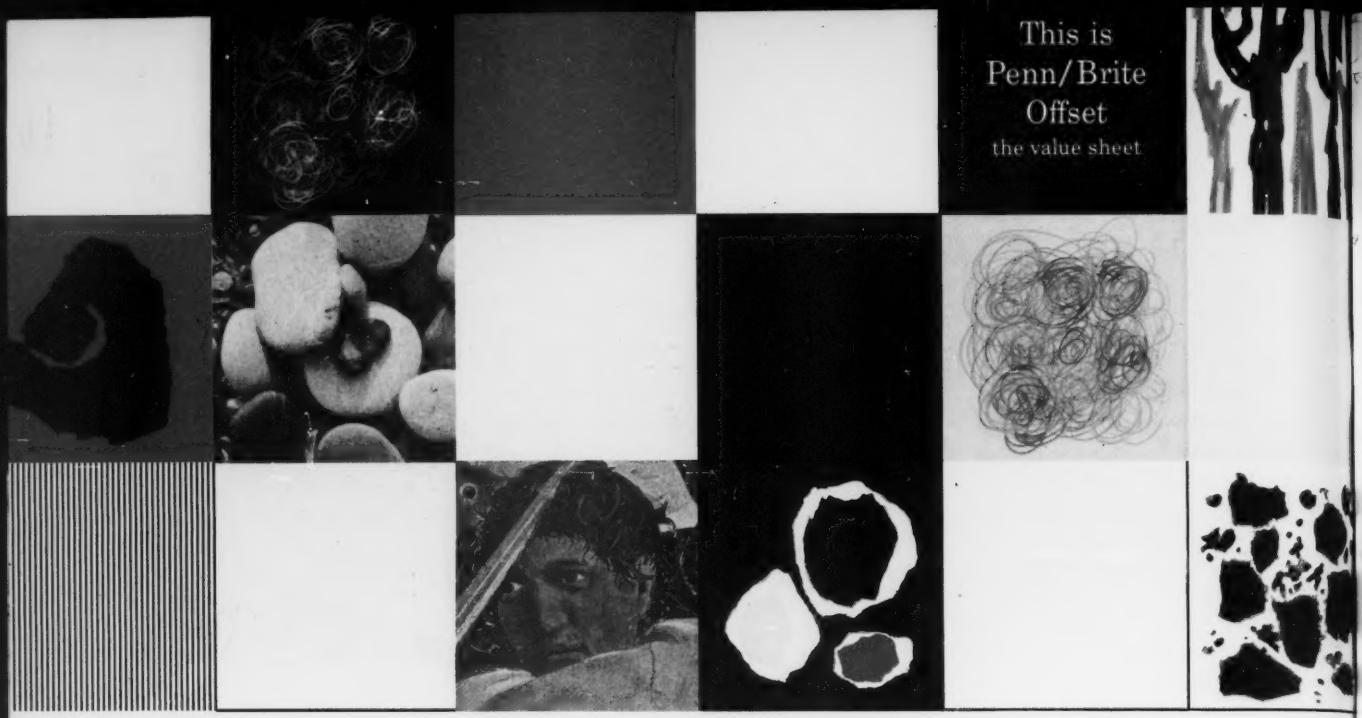
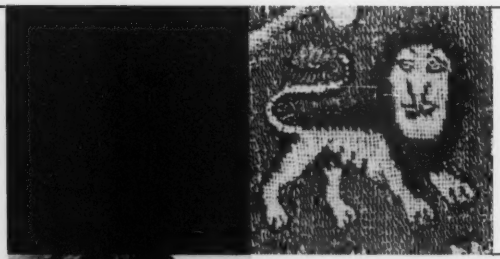


New York and Penn commissioned designer Leo Lionni to create this insert, and to incorporate in it practically all of the demands on the printability of paper which could be encountered.

See for yourself how faithfully Penn/Brite Offset has reproduced each of his design elements . . . how well it has passed his "torture-test."

Penn/Brite Offset is the white, bright, value sheet that comes to you moisturized and double-wrapped. Write for new, complimentary swatch book and the name of your nearest distributor. New York & Pennsylvania Company, 425 Park Avenue, New York 22, New York.

New York and Penn
Pulp and Paper Manufacturers



Designer: Leo Lionni is Art Director of Fortune Magazine. During the past decade his work has won him designation as "Art Director of the Year—1955" and the Gold Medal of the Architectural League of New York—1956. He is Design Director for Olivetti and was the designer for the "Unfinished Business" pavillion at the Brussels World Fair last year.

Illinois Printers Fight Tax

Illinois printers were asked last month to "Estimate what a 3½ percent tax would do to you." The question was raised by their state-wide trade association, Printing Industry of Illinois, in an effort to alert the graphic arts industry throughout Illinois to the latest bill tossed into the state legislature's hopper, which would extend the state sales tax to gross sales of custom-made items of tangible property and raise the tax from 3 to 3½ percent.

State courts have ruled that printed products are custom made and, under existing statutes, are not subject to the present sales tax. The proposed bill, H-1145, seeks to circumvent these decisions by amending the tax act to cover custom-made products.

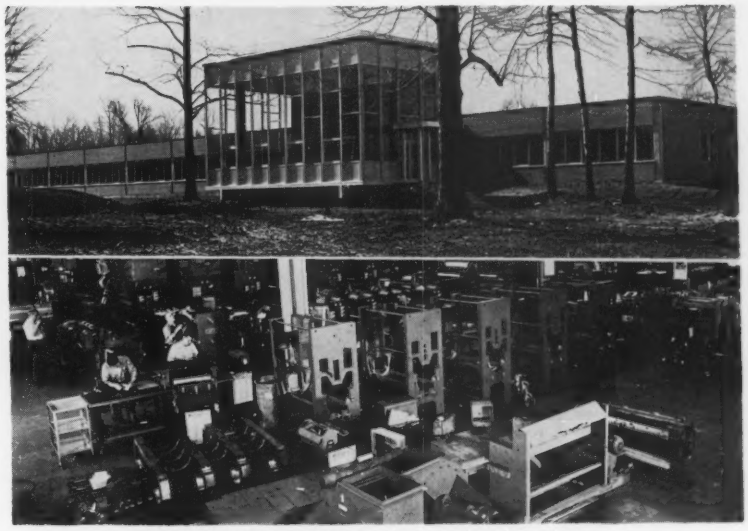
O. H. Runyan, legislative director of PII, who for 22 years has battled efforts to levy a sales tax on printed matter, warned Illinois printers that "This may be your biggest tax fight." Average printing profits, nationwide, Mr. Runyan said, in a bulletin to association members, are about $3.12 on sales of $100.

Magazine printing, which is a large volume item in Illinois print shops, could be shifted to other states, he pointed out, while advertising printing can be done and shipped anywhere. If this occurs, he said, employment in Illinois printing plants, which in 1958 was over 100,000, would be reduced materially.

State revenue authorities need some $283 millians of additional revenue to balance the biennial budget and estimate that the sales tax, increased to 3½ percent, would produce $52 millions from printing and other service industries.

Mr. Runyan said, "The one thing that can save us from a tax is a torrential uprising of individual activity in contacting those in your district sent to Springfield to represent you." He enclosed a list of members of the House committee on revenue and urged every printer to "Write, call or personally contact your representatives to voice your opposition and give some reasons why."

Press Tours New Champlain Gravure Plant



Exterior (top) and interior views of Champlain plant.

The Champlain Company, Inc., leading manufacturers of rotogravure printing and fabricating equipment, last month showed the trade press its plant in suburban Roseland, N. J.

Set on a wooded 17-acre site a few miles west of the Garden State Parkway, the one-story plant covers nearly 80,000 square feet, more than three-quarters of which is devoted to the manufacture, assembly, and testing of the company's diverse line of printing and fabricating equipment.

General plan of the building is a "T" pattern, the blunt cross of which embraces reception lobby, air conditioned offices, conference rooms, engineering department, and cafeteria (approximately 18,000 square feet). The stem (60,000 square feet) contains manufacturing and assembly areas.

Fox River Opens Sales Service Program

Charles Krueger, John Roberts and Jerome Furlong review a printing job done on Fox River paper. The firm, located in Appleton, Wis., recently inaugurated a new sales service program.

CAESAR-SALTZMAN

PRECISION combination ENLARGING, REDUCING and COPYING CAMERA FOR COLOR

CONDENSER OR DIFFUSED TYPE WITH REGISTRATION

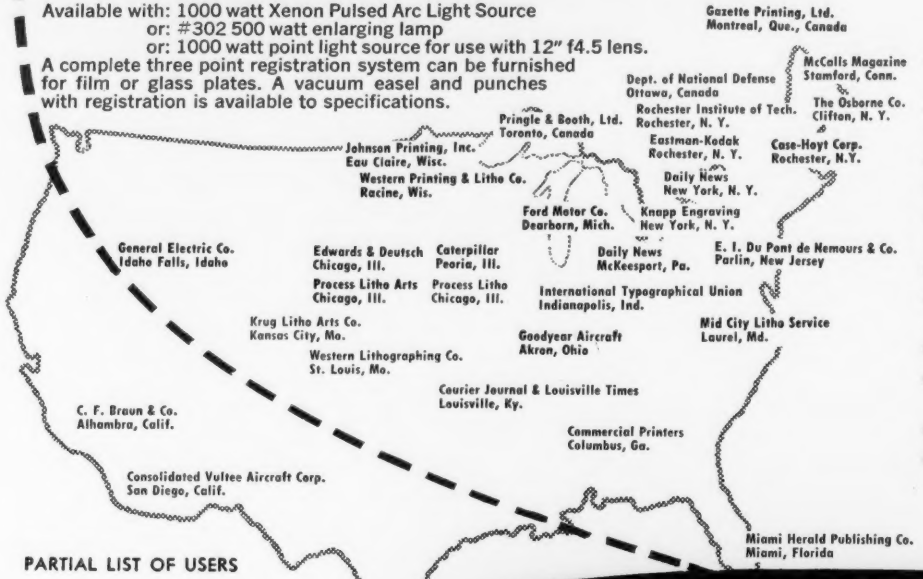
FEATURING ASCORLUX PULSED XENON ARC LIGHT SOURCE
FOR CONSTANT LIGHT OUTPUT AND DAYLIGHT COLOR BALANCED SPECTRUM

used COAST to COAST and throughout the World

Here's the most versatile enlarger in the Graphic Arts field. Employing a universal light head and 12" f.9 Goerz Artar Process Lens, it can be used for making continuous tone separation negatives direct from copy, or continuous or halftone color separation negatives direct through a mask, transparency, filter, gray or magenta screen. Also halftone positives.

Available with: 1000 watt Xenon Pulsed Arc Light Source
or: #302 500 watt enlarging lamp
or: 1000 watt point light source for use with 12" f4.5 lens.

A complete three point registration system can be furnished for film or glass plates. A vacuum easel and punches with registration is available to specifications.



PARTIAL LIST OF USERS

Model Shown MB6DLU

COUNTERS ON CAMERA AND LENS MOTION

Accessories Available:

- Combination Enlarging & Copying Camera with Registration
- Three Point Glass Negative or Peg Registration System
- Lenses of Short Focal Length for Reductions
- Cones of Various Lengths for Reductions
- Variac, Voltmeter, and Voltage Stabilizer for Light Control
- Electronic Timer
- Special Positive Interlocking Lens and Camera Motion
- Precision Reducing Negative Holders
- Vacuum Easel with Pre-Register Screen Angles
- Vacuum Pump Assembly
- Lens Calibration and Ratio Factor Chart

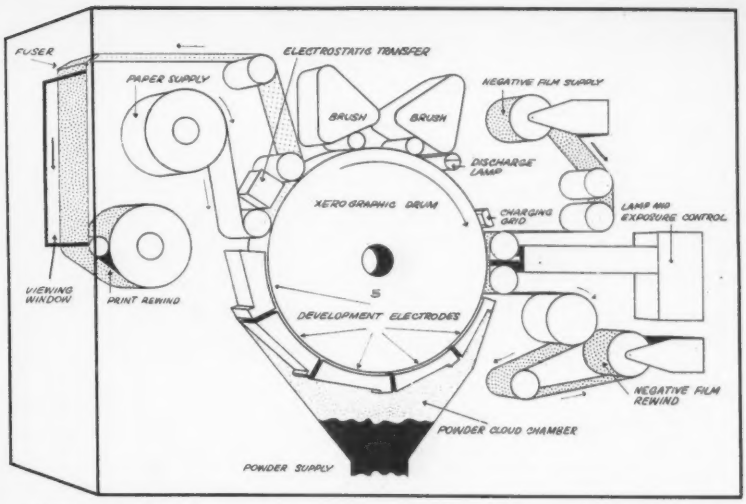
Write For Complete Literature

Headquarters for Professional Photographic Equipment Since 1920

J. G. SALTZMAN, INC.

SALES DISTRIBUTORS for CAESAR MANUFACTURING, INC.

480 Lexington Avenue, New York 17, N. Y.



Additional illustrations of the new Haloid-Xerox automatic picture printer demonstrated to the press in late April (See May ML, page 109). Photo at left shows control panel and print-viewing window of the unit, developed for Air Force map work. Xerographic prints, which are completed in 22 seconds after exposure of the aerial roll negatives, may be monitored by operator before reaching the take-up roll. Modifications of contrast and exposure are made by varying electrical charge on drum. Control knob is calibrated to correspond with various grades of photographic papers. **Right:** Schematic diagram of the picture printer.

Hall Will Print Catalog

W. F. Hall Printing Co., Chicago, has signed a $100 million contract with Montgomery Ward Co., Chicago, to print the Ward mail mail order catalog. The 10-year contract provides for the printing of all Montgomery Ward catalogs by the Hall Co. Hall will use gravure and letterpress equipment.

Hall has shared in printing Ward's catalogs since 1888 and currently is handling about 40 per cent of the printing, binding and distribution of the company's annual volume of 46,000,000 mail order catalogs. Under the new contract, the first catalogs will be printed in the fall of 1960. The exclusive printing agreement extends from September 1960 to September 1970.

•

Ludlow Advances Ferrari

Frank J. Ferrari has been appointed New York district manager for Ludlow Typograph Co., Chicago.

Ferrari

He succeeds James A. Westhaver, who is now associated with the Pittsburgh White Metal Co.

Arthur Mahnken Honored

Arthur J. Mahnken, vice president of Sinclair and Valentine Co., New York, was honored for 50 years of service to the graphic arts industry at the 33rd Annual, 5th District Conference of the International Association of Printing House Craftsmen, May 22, in Dayton, O.

Mr. Mahnken was honored also by officers of Sinclair and Valentine, who recently held a luncheon in his honor.

Mr. Mahnken has retired from active service with S. & V. but remains with the company as a consultant.

•

To Make Ink for Forbes

Sinclair and Valentine Co., New York, has assumed printing ink production for the Forbes Lithograph Manufacturing Co.

Charles A. Ward Dies

Charles A. Ward, president of Brown and Bigelow, St. Paul, died in his sleep May 25, at the Beverly Hills Hotel, Los Angeles.

He was president of the St. Paul firm since his election in 1933, having started with the company nine years earlier as a bench hand. Mr. Ward was well known for his many charitable activities.

In addition to being president and general manager of Brown and Bigelow, he was chairman of the board of Brown and Bigelow Agency, the Beissel Co., the Quality Park Engraving Co., the Consolidated Printing Ink Co., Graphic Arts Engraving Co., Quality Park Box Co., Quality Park Envelope Co., Shelly Co. and Western Lithograph Co., Los Angeles.

•

Hampton Elects Dorman

Kenneth Dorman, former editor of *Offset Duplicator Review*, was elected vice president of Hampton Processes, Inc., Newton, N. J., late in May. He will be in charge of sales and new product development.

Closely identified with the graphic arts field and as a consultant on engineering and office reproduction and duplicating equipment for over 10 years, Mr. Dorman had been editor of *Offset Duplicator* since 1955. Prior to that he was sales manager for Merritt-Lacey Corp.

Posters Promote St. Louis Show

Posters promote posters: St. Louis Art Director's Club last month used the most logical medium—posters—to promote its annual exhibition at Hotel Jefferson, May 6-7.

Book Review

The Magic of Making Halftones, by K. W. Beattie, 100 pp., many pages of photographs and charts, plastic bound. Published by Litho Books, Box 31, Caldwell, N. J. $4.25.

Despite the intriguing title this is not an expose of halftone photography based on sleight-of-hand and magic potions. But, in a sense, the contents of this book do offer a magic formula of sorts. The magic, however, is compounded of sound practical advice resulting from years of production experience presented in simple terms and in an interesting style. Author K. W. Beattie is eminently qualified to give practical, down-to-earth advice because he has spent most of his career in the graphic arts as a craftsman and technician, teacher, inventor and, currently, as manufacturer of the well-known Kenro vertical process camera.

Successful everyday techniques for making halftones with engraved screens, contact screens and Autoscreen film are outlined in detail. Simple but effective control in exposure and processing by means of a five-step gray scale is not only thoroughly covered in the text but profusely illustrated with "right" and "wrong" pictures.

Considerable attention is given the variables of copy, camera lights, processing, etc. The author describes any number of helpful gadgets, techniques and shortcuts which were widely used by oldtimers but seem to be ignored by, or unknown to, the present generation of cameramen. How to rescreen halftone copy, making dropout masks, fine-line pickups and related items are also discussed.

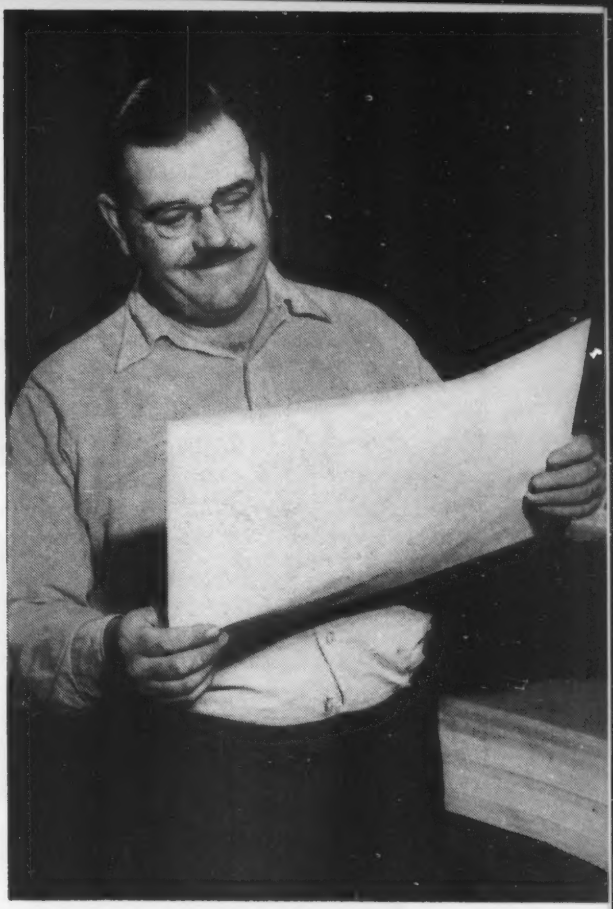
Although the novice will benefit most from this book, the experienced cameraman too will benefit from the wealth of varied and useful information it contains. While not intended to be a technical treatment of the subject, it is nevertheless based on sound and proved technical principles. The author's knack for simplifying the technical is indeed the magic of this book.—*H.P.P.*

NEW!

TRO-MARK

Easiest-working gummed papers you ever had!

by The Gummed Products Company



Here are adhesive papers with more production advantages than any you ever used before! TRO-MARK Adhesive Label Papers really stay flat in storage, on the press . . . before and after printing. TRO-MARK will not curl, even when under relative humidity as high as 70%. TRO-MARK feeds, prints, delivers, jogs, perforates and die-cuts just as if it had no adhesive at all!

With TRO-MARK on the job, you get an unrivalled combination of all the most-wanted time-saving, cost-cutting characteristics that make this the smoothest-running, best-printing adhesive stock for your every need. It's available NOW from your TRO-MARK Distributor.

LOOK AT THESE TOP ADVANTAGES OF TRO-MARK*

- **Better Printing Surface** because the adhesive is neither broken nor stack calendered. You get excellent reproduction using less ink than with other stocks.
- **Trouble-Free in Storage** TRO-MARK stays flat, will not curl or block under a wide range of temperature and humidity variations.
- **Allows Longer Press Runs** TRO-MARK stores beautifully after printing, allowing you to run larger quantities of labels without fear of in-storage spoilage.
- **More Perfect Sheets Per Hour** on all types of printing equipment because TRO-MARK stays flat even under multiple press run.

This insert is printed on
Trojan TRO-MARK
#801-45# E. F.

*"TRO-MARK" licensed under Patent #2793966

The Gummed Products Company
Troy, Ohio • A Division of St. Regis Paper Company

Your Sign of Assurance of:

· QUALITY

· SUPERIOR SERVICE

on all Offset Supplies and Plate-Making Equipment

for the Graphic Arts Industry.

FREE — New Grafco Catalog. For your copy, write today on your firm letterhead.

GRAPHIC SUPPLY CO., INC.
22 BOND STREET, NEW YORK 12, N. Y. BOSTON: 144 OLIVER STREET

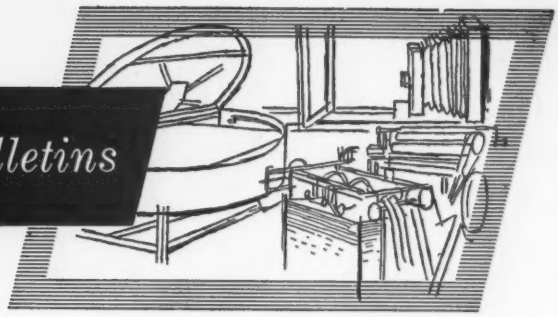
This advertisement printed on Williamsburg Offset – Basis 70

adds the spark of life!

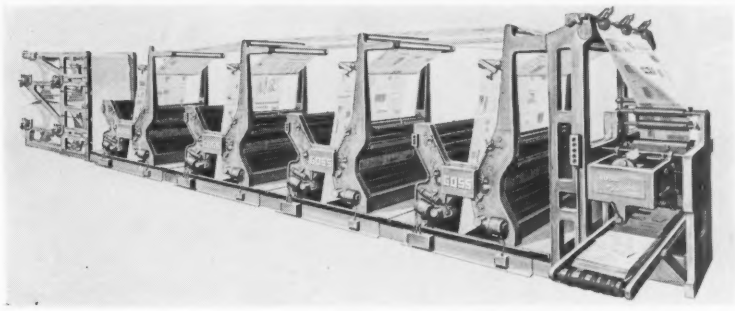
All the sparkle and spontaneity of the real thing! When you print on Williamsburg Offset you capture brilliant highlights—subtle shadings. And at such reasonable cost! Offset or letterpress. Ask your local Union-Camp fine papers distributor about sizes, weights and samples of Williamsburg—the industry's newest offset!

UNION-CAMP FINE PAPERS
UNION BAG-CAMP PAPER CORPORATION
Fine Paper Division, Franklin, Virginia

Equipment, Supplies, Bulletins



Goss Building Web Press for Newspapers

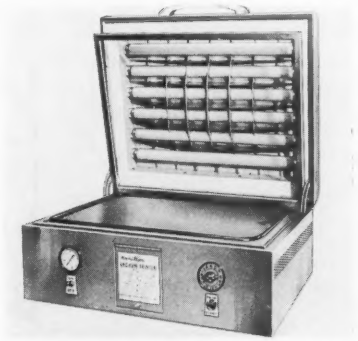


A new web-offset press for newspapers has been introduced by the Goss Co., a division of Miehle-Goss-Dexter Inc., Chicago.

According to C. S. Reilly, vice president, for sales, of the Goss Co., presses with a total of 30 units have been purchased by publishers in Missouri, Michigan, Ohio, Washington and Virginia.

The new press prints blanket-to-blanket with no dryers required. The press consists of a roll stand, printing units and a jaw type folder, with each unit printing four standard or eight tabloid size pages. Printing cylinders are two pages wide and one page around. Pages can be printed eight or nine columns wide with a 22¾" cutoff, according to the company.

The press may be expanded from one to six units to produce up to 24 standard or 48 tabloid size pages. Units may be superimposed or added in line to print color or to increase the number of pages.



New Hamilton Vacuum Printer

The Hamilton Manufacturing Co., Two Rivers, Wis., has introduced a self contained automatic vacuum printer. According to the company, the new printer is suitable for small plant, auxiliary or even darkroom use. A feature of the unit is a newly designed smooth surface blanket for a tight center seal. Vacuum pump, controls and relays are contained in the base of the printer. The light source is in the lid. A 110 volt outlet is the only power requirement.

Baskerville On ATF Typesetter

American Type Founders Co. has announced that Baskerville, considered to be the most widely used and accepted type face for book and periodical work in the U.S., now is available in photographic disc format for use on the ATF typesetter.

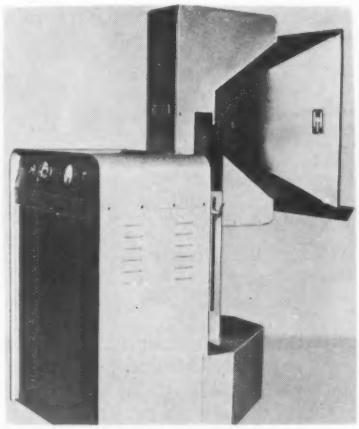
ATF Baskerville, a conversion for photographic reproduction, was designed by Thomas Thompson, a leading type designer and typographer. The new type is available in 8 and 10 pt. roman and bold and 8 and 10 pt. roman and italic.

•

A. B. Dick Image Master

A new, direct image offset master for short runs of 100 copies or less is being made by the A. B. Dick Co., Chicago.

The new master was developed principally for systems work in which many masters are used, but where relatively few copies are required from each master.



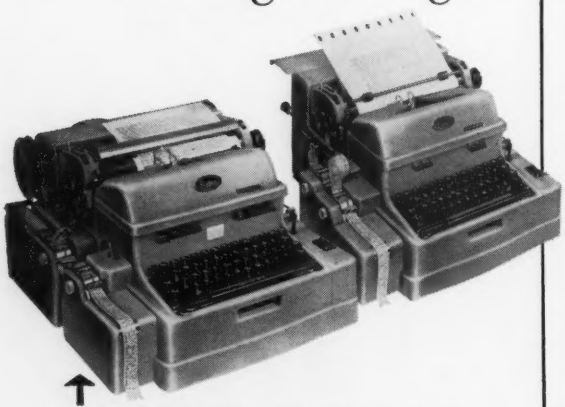
Introduces New Arc Lamp

Macbeth Arc Lamp Co., Philadelphia, has introduced a new printing arc lamp, the Mark Fifty. It is the first in a series of new lamps inaugurating the company's Golden Anniversary. The new lamp is a high intensity, motor controlled printing lamp with a console type mounting containing a timer, starter, integral wiring, fuse protection and a built in, filtered exhaust system.

One of the ways

Marvelous Friden JUSTOWRITER

can do your business typesets (with justified margins) at big savings



On this Justowriter Recorder (unit #1) any typist becomes an expert type compositor. Her usual typing -- without involving special positioning or extra time -- produces simultaneously (a) a typewritten sheet, for visual check, and (b) punched paper tape with identical copy coded into the tape holes.

Justowriter unit #2, the Reproducer, receives code tape ... "reads" it ... and automatically composes the original copy in clear, accurate, justified-margin form. All kinds of copy -- straight matter, centered, run arounds, line leaders, tabular matter handled at 100 words a minute.

Jobs like these* result from Justowriter professionally composed typesets on direct image plates, as used by duplicating machines, or reproduction proofs suitable for lithographic printing.

Compared with hot metal composition, Justowriter type-composition yields real cost savings.

The finished work is attractive, as you can see from this printing (itself set on the Justowriter and showing Justowriter-controlled justified-margins.) Fourteen different Justowriter type faces, sized from 8 to 14 points, are available.

Write today on your business letterhead for additional information on the Justowriter, a basic Tape-Talk machine in today's "new world for business" created by FRIDEN, Inc., San Leandro, Calif. Sales, service, instruction throughout world.

(*bulletins, manuals, price lists, booklets, directories, catalogs, direct mail literature, house organs)

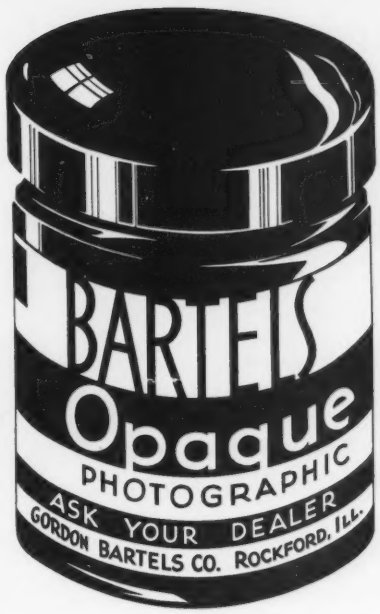
FRIDEN SILVER ANNIVERSARY 1934·1959

New Douthitt Printing Frames

The Douthitt Corp., 680 Fort St., Detroit, is producing a new line of vacuum printing frames.

Fingertip control of the new frames is achieved by use of a spring and

fulcrum bracket, eliminating clamps and weights. An automatic clamp prevents the operator from opening the glass until vacuum has been released, thus eliminating the possibility of breaking the glass with subsequent danger to personnel.

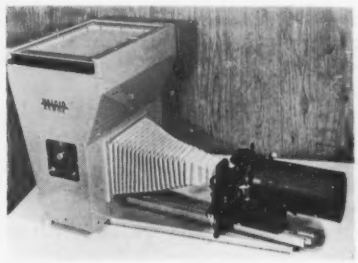


The frame utilizes a separate standing arc lamp to insure overall light coverage. Other features include an automatically regulated vacuum reserve tank, vacuum gauge, interval timer and a full size drawer for storage. Available sizes range from 20 x 24" to 40 x 50".

•

Haloid-Xerox Microfilm Enlarger

Haloid-Xerox, Inc., Rochester, N. Y., has developed a new Xerox micro-



film enlarger to be used with its standard copying equipment.

The microfilm enlarger handles roll or card mounted microfilm of original documents. Used with Xerox copying equipment, it provides black and white copies up to 8½ x 13" on plain, unsensitized vellum, acetate or offset paper masters, according to the company.

How Baldwin® ink-roller washups cut costs...

The photos tell the story . . . show why pressmen and management agree* no press is complete without a Baldwin Press Washer:

1. **With press operating, pressman squirts solvent over the rollers**
2. **He brings Washer blade into contact with vibrator roller**
3. **Pressman removes drip pan and cleans blade with a few swipes of a rag**

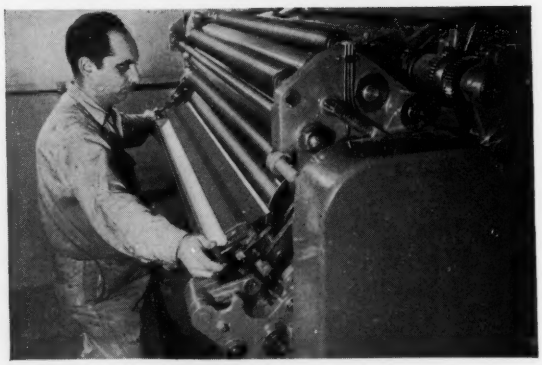
That's ***all*** he does! The Press Washer strips ink from all but the fountain roller in a matter of minutes. ***Fast*** cleaning means lower costs; ***thorough*** cleaning means higher quality. And you save real money on rags and solvent!

Yes, it will pay you well to get ***all*** the facts about Baldwin Press Washers. Just send us the make and model of your presses.

*A pressman says: "I get a good clean washup in one third the time since my boss got me this Baldwin Press Washer."

*An executive says: "With quality color the thing today, really clean washups are more important than ever. We get them *fast* with Baldwin Press Washers!"

1 *Solvent is applied*



2 *Blade contacts vibrator*

3 *Drip pan is removed*

WILLIAM GEGENHEIMER CO., INC.

80 Roebling Street
Brooklyn 11, New York
Phone: EVergreen 8-5610

Manufacturers of Baldwin Ink Fountain Agitators • Baldwin Press Washers
Baldwin Water Stops • Baldwin Water Levels

Lawson Announces New Trimmer

A new semi-automatic three-knife Rapid Trimmer for books, magazines and pamphlets has been announced by The Lawson Co., Division of

Miehle-Goss-Dexter, Inc., Chicago. According to the company, the trimmer is specifically designed for the medium size commercial shop where volume production is not of primary importance. The new unit incorporates most of the mechanical features of Lawson's automatic model, the Series "C" three-knife Rapid Trimmer.

The new trimmer handles a wide variety of work in lifts as high as 4¾", one or two-up. The trimmer is said to be equally efficient on all types of bindings — Smyth or McCain sewed, Perfect bound, side or saddle stitched. The standard machine can handle work in trim sizes from 2 x 3⅛" to 11¾ x 16⅞". A larger trim size capacity (to 11¾ x 18⅞") is available.

A feature of the new trimmer is its safe and easy method of operation. The trimming area is housed under a protective hood. The operator places the work to be trimmed against the back gauge, then pulls down the knob which closes the safety window or guard, thus starting the trimming cycle. The machine then automatically clamps the lift and trims the books on all three sides. The guard automatically raises after the trimming cycle is completed, permitting the operator to remove the trimmed work.

Additional information is available from the Lawson Co., 2011 Hastings Street, Chicago 8.

Harris Single Color Offset

A new single-color 23 x 30" offset press has been introduced by the Harris-Seybold Co., a division of Harris-Intertype Corp., Cleveland.

The new model, available with either the Harris feed roll register system or three-point register, is already being shipped to customers from the company's Dayton plant. The new LXB will be on display at the Graphic Arts Exposition in New York in September.

Designed as a job press, the company says, the new press will handle stock sizes from 9 x 12" through 23 x 30" up to .030 thickness at speeds up to 8,000 impressions per hour.

Features include automatic and centralized lubrication; an electronic trip to detect late, early, crooked or absent sheets; rubber base dampeners and increased dampener range for moisture control; a sheet settling device in the delivery to aid in operat-

Use fine-quality Wausau impression papers

Making a good impression is easy, our "Wausau Paper Doll" will tell you, if you use Wausau Impression Papers for better *printing* impressions. These superb papers bring out the best in plates, add new dimension to art and text, give every print job extra quality. The papermen of Wausau pass down their skill from father to son, combine their painstaking craft with advanced research, error-free process control, modern manufacturing facilities. Your impressions will make a better impression on the right people, too, when you use Wausau Impression Papers. Write for samples today.

FREE—"AMERICA ON PAPER" Write on your letterhead for "America on Paper", a 16-page book illustrating documents and papers that made American history.

Artisans of Fine Papers

Wausau

IMPRESSION PAPERS

WAUSAU PAPER MILLS COMPANY
General Sales Office and Mills, Brokaw, Wisconsin
District Sales Offices: Chicago Cleveland Los Angeles New York

Wausau Bond • Wausau Mimeo Bond • Wausau Duplicator • Wausau Ledger • Exact Bond • Exact Mimeo Bond • Exact Duplicator • Exact Ledger
Brokaw Opaque Offset • Wausau Index • Wausau Text • Everest Text • Wausau Bond Envelopes • Wausau Text Envelopes • Register Bond

ing at high speeds; a simplified two-sheet choke; a tachometer and a plate cylinder lay-adjustment indicator.

New pull-type side guides are available as alternate standard equipment.

•

ATF Product Bulletin

American Type Founders Co., 200 Elmore Ave., Elizabeth, N. J., is distributing a new product bulletin entitled the "Senator Product Bulletin." It is the second in a series of six-page technical analyses and illustrations of various new machines and processes handled by ATF.

Copies are available from the home office or from branch offices.

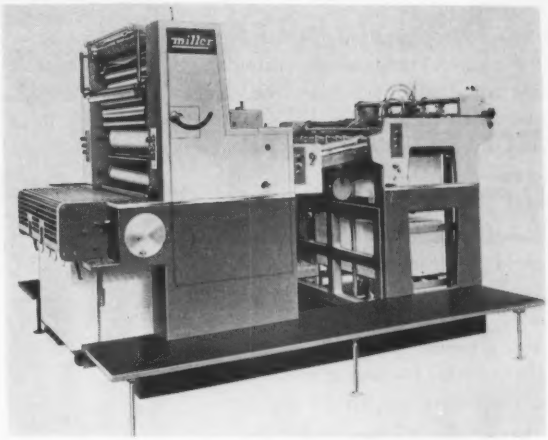
•

Monadnock Envelope Papers

Monadnock Paper Mills, Inc., Bennington, N. H., is distributing a new line of wove, vellum and titanium filled envelope papers.

According to the company, the sheet was thoroughly field tested before its introduction and found to be printable by all processes including multicolor lithography.

New Miller Single Color Press



Miller Printing Machinery's new SJ 26 x 36" single color offset press.

Miller Printing Machinery Co., Pittsburgh, is producing a new addition to its line of sheet fed offset presses, the Miller SJ 23 x 36".

According to the company, the press is constructed to allow the addition of a second unit to increase volume or do two color work. The press has a maximum speed of 7,200 impressions an hour. Clamping arrangements are for a standard 25½ x 36" plate or an optional 26¾ x 36" size.

The company also reports that the new press has a stream feeder with motorized reloading type pile, feed roll register control, motor driven water fountain roll with stepless speed control, chain driven inker and provisions for continuous delivery.

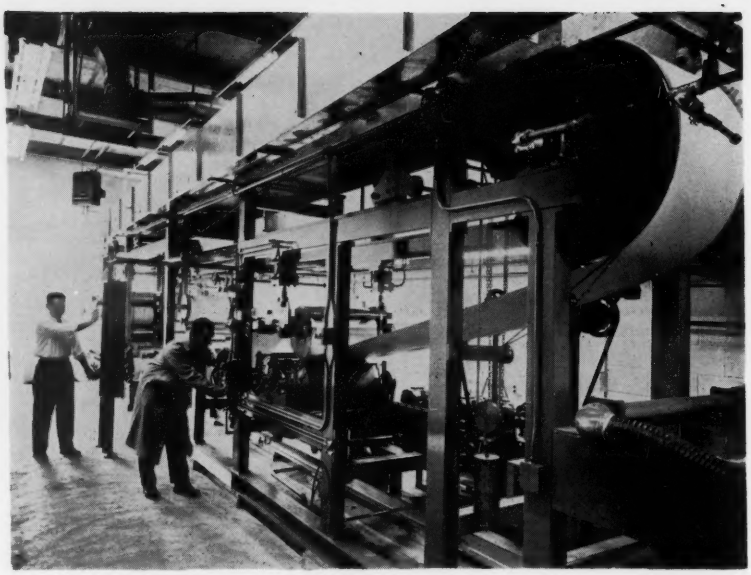
Booklet Describes M-C-R

Details of the M-C-R system for mechanical registration of color work in the camera and on the stripping table are given in a booklet available from Mechanical Color Registration Company, 418 East Maynard Ave., Columbus 2, O.

M-C-R is short for Mechanical Color Registration, a system which is said to assure accurate register of color work from the time copy is placed in the camera until the separated screened negatives reach the stripping table for assembly. No register marks are needed at any time.

Among the mechanical fixtures incorporated in the system are an aluminum alloy frame bar fitted with register pins, a film positioning bar, metal inserts for the camera back to guide the pins, a pin register plate and a stripping bar, fitted with register pins.

A sequence of photos illustrates the M-C-R procedure. Included with the booklet is a 17 x 22″ press sheet of a four-color offset job made by the system.



Full-length view of National Starch and Chemical Corp.'s experimental paper coating machine at research laboratories in Plainfield, N. J. Coater is 45 feet long, 10½ feet high. It was shown to the trade press last month.

New Carbons For Litho

Carbons, Inc., Boonton, N. J., sole distributor in the U. S. for Lorraine Super-Orlux carbons, now is distributing a new carbon light designed for use in platemaking, photo printing, and photocomposing in letterpress, lithography, gravure and silk screen.

Why is the ATF Chief 22 the most popular press in its size range

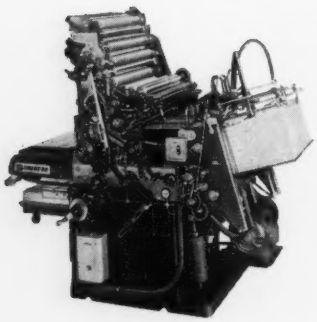
Because it combines top quality printing with fast changeovers and easy operation

The Chief 22's high popularity stems from its high production. Because it is easy to set up and run, thousands of profit-minded printers rely on the Chief 22 to give them the best possible return on their production time. And because of its excellent design, the Chief 22 turns out quality work capable of passing the most critical inspection.

When you're considering an offset press remember these advantages:

The Chief 22 is a *compact* press, occupying only 51" x 76" (with extreme extension and largest motor). You can fit it into your shop layout without making major changes and moves.

The Chief 22 has form rollers statically and dynamically balanced—a plus factor found only in ATF Chief presses. Once rollers are set, they maintain their position throughout the run.



The Chief 22's inking system gives full coverage for every job, including process color work and large solids. Eighteen rollers (including three form rollers, each of a different diameter) provide thorough breakup and distribution of ink, delivering a fine film to the plate.

The Chief 22's stepless speed control permits settings for just the right rate for each job, giving the best combination of speed and control.

The Chief 22 is closely related to the well-known ATF Chief 20 and the ATF Chief 29, and has many of the special features that have made those two presses so well known in the trade.

But don't stop here—get all the facts on the ATF Chief 22. Check your local ATF Representative, or write direct to:

ATF

American Type Founders

200 Elmora Avenue, Elizabeth, N.J.

Better, more profitable printing . . . from the most complete line of equipment

Nothmann Joins Miehle

Dr. Gerhard A. Nothmann has joined the Miehle Co., a division of Miehle-Goss-Dexter, Inc., Chicago, in the newly created post of assistant to the vice president of research and engineering, and director of creative and development engineering.

NCR TESTS CHECKS

(*Continued from Page* 72)

checks using a printer's plastic gauge.

2. A second test is made using a 50x optical comparator. Individual magnetic characters are gauged for print dimensions, spacing, and so on.

3. A signal level test and a readability test are made of random checks using a machine called an "evaluator," devised by NCR engineers for testing the signal level and electrical waveform of 14 magnetic characters of a check.

4. A paper-handling test is made by automatically sorting the encoded checks on a Pitney-Bowes National Magnetic Character Sorter. This test determines how physical properties of the check paper react to rapid mechanical sorting.

NCR suggests that 1,200 encoded checks be submitted for the test in order that the dimensions and quality of the printed characters can be verified as meeting ABA specifications. The testing service can be obtained by contacting any local NCR branch, or by writing Product Development Department, The National Cash Register Co., Dayton 9, O.★

COLOR SEPARATION

(*Continued from Page* 48)

you to follow the trade shop recommendations. The color cameraman actually separates and masks with certain inks in mind, depending on the copy.

7. Stock — Always let your supplier know the stock on which the job will be run. If possible, try to supply him with enough sheets for the proof run, if the paper is not the usual coated or offset.

8. Screen Ruling — Here, there is not much problem. Some shops still use 120 or 133 line, but the majority of separation houses now work with 150 line.

9. Delivery Date — This is always a problem. One thing is very important: Almost every job is in a rush, but realize that of all the rush put on work in lithography, the least pressure should be placed on the color separator. He starts the job, and sets the foundation for the other operations.★

PHOTO CLINIC

(*Continued from Page* 65)

more than a sensation. This is a book on color that stresses the fundamental principles basic to all phases of color reproduction. It provides the information needed in common by all printing craftsmen—the lack of which is so evident at technical meetings in our industry.

A detailed treatment of a more

limited aspect of color is found in *Vision and the Eye*, by M. H. Pirenne. This book, of course, emphasizes the observer's role. The physiology of the visual mechanism—how it works, its limitations, abnormalties, etc., are the subject matter of the 17 chapters. The manner in which the author presents his material makes this book a valuable, easy-to-read introduction for those interested in this segment of the color problem.

A valuable source of information of still another phase of the color problem of the book entitled *Hickethier Colour System*. This unusual book, as the name implies, is primarily concerned with the classification of color sensations into an orderly system. As a prelude to the main theme, the fundamentals of color are simply described by text, and vividly and dramatically illustrated in color. The author carries the reader step by step through the process of creating a color notation system. Again, this is accomplished by means of an easy to follow text, many full-color illustrations and nine color charts. The remainder of the book deals with the useful applications of a color notation system. This includes color photography and process work.

Originally published in 1952, it was not until late in 1957 that an English edition of Hickethier's work became available. In addition to its value as an excellent treatment of color classification, this book is an outstanding example of superb color printing.

COLOUR IN THEORY AND PRACTICE. Edited by H. D. Murray, Chapman & Hall Ltd., 37 Essex Stre ', W.C.2, London. 360 pp., many illustrations and literature references, 75 shillings.

VISION AND THE EYE, M. H. Pirenne, Chapman & Hall Ltd., 37 Essex Street, W.C.2, London. 182 pp. 15 shillings.

HICKETHIER COLOUR SYSTEM, Alfred Hickethier, Verlag H. Osterwald, Hanover, Germany. English edition may be ordered through Stonhill & Gillis, Ltd., 296-302 High Holborn, London W.C.1. 99 pp., profusely illustrated in full color, 10 full-page color charts, bound in red cloth with gold embossing, approx. $11.50.★

PENNINGTON PRESS

(*Continued from Page 52*)

oldest and largest commercial printers in the city.

At that time no company manufactured creative point-of-purchase merchandising programs in Cleveland or nearby Pittsburgh or Detroit. Following Mr. Pennington's suggestion, the Gilman Co. installed its first lithograph press, needed for production of the displays, in 1949, and put in two more presses by 1951.

In that year the Merrick Lithograph Co. was formed as a subsidiary of Gilman, and Mr. Pennington, then 29, was made vice president and general manager, and given a 10-year option to purchase a substantial minority stock interest. Under Mr. Pennington's direction, Merrick's first-year gross sales totaled $325,000, growing to $2,600,000 in 1958.

In 1957, a group headed by Mr. Pennington bought Merrick Lithograph Co. from the Merrick family. Mr. Pennington owns a majority

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Offset printing quality a piercing problem? If it's paper that's ambushing you, try fine quality, double coated Consolidated Enamels and your problems will bite the dust. You get truly outstanding, trouble-free printing results *every time* because every sheet is double coated on both sides to give a velvet smooth, uniform printing surface. They run better—print better—look better, *yet Consolidated double coating doesn't cost you a penny more.* Ask your Consolidated Merchant for free trial sheets. Make a test run and see for yourself.

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Lithographers, Ann Arbor, Mich.

Joseph W. Edwards, President, states: "Quality offset book printing requires quality negatives. Now we get negatives of uniform printing blackness **automatically,** with our new Lithoflo Processor, and it'll pay for itself easily in its first year of operation!"

Edwards Brothers lithographed and bound over 2,125 titles last year, including text books, technical manuals, year books, reprints, and many other types of literature. One of the most productive printing firms of its type, this progressive company now operates in a brand new ½-million dollar building, at Ann Arbor.

Described as "indispensable," their new *Lithoflo Processor* now produces 25% *more* negatives . . . all of superb, *uniform* quality . . . than previous methods had produced, while saving better than 10% on chemical consumption!

Graphic arts negatives or cut sheet film are developed, fixed and washed at speeds up to two and one-half 20″ x 25″ sheets per minute! Time, temperature and agitation are automatically controlled in its simple, one-man operation.

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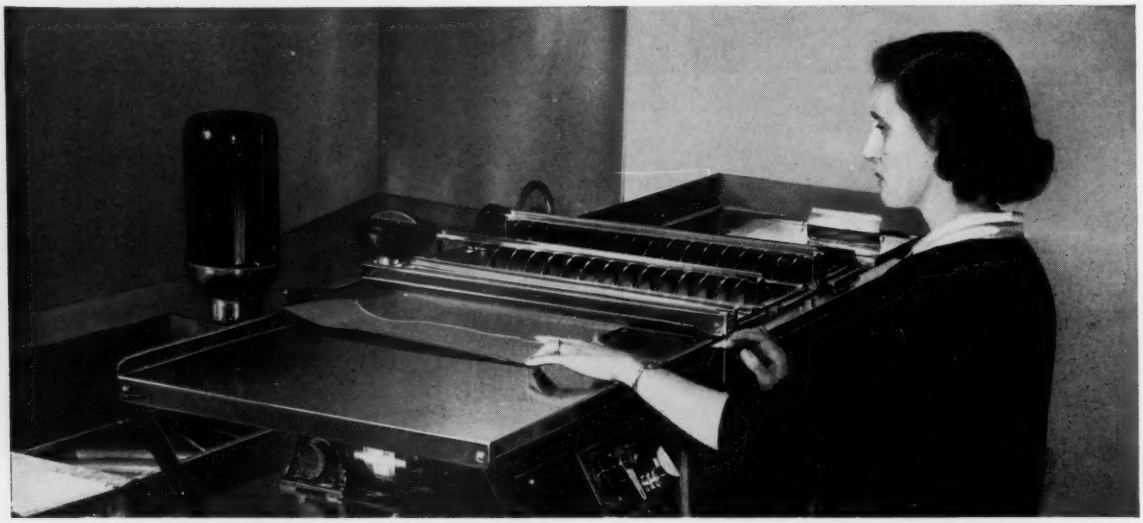

EDITORIAL

(*Continued from Page* 31)

scenery they get to see is the inside of a hotel.

Despite all the groans about travel taking valuable time away from business, it begins to look as though it will be ever thus. For even as we hear that age old complaint "why doesn't someone do something about all these conventions?" we get word of yet another.

With specialization increasing in lithography — web-offset, printing with magnetic inks, book, poster, publication and all the other types — there is every reason to assume that the airlines and trains will see more, not less, of our industry's members.

And, while busy lithographers can ill-afford the time these meetings necessarily take from production, they certainly can afford even less to miss them.★

stock interest in the firm. The remainder is owned by eleven key employes, and a leading Cleveland lawyer.

Today Merrick has three plants in Cleveland, with a total of 33,000 square feet devoted solely to manufacturing production facilities and general office space.★

NYEPA FORUM

(*Continued from Page* 46)

wipe-on sensitized plates.

"The decade ending with this year," said Mr. Materazzi, has seen more advances in the field of platemaking than in the previous century and a half. These advances have been in large measure responsible for the explosive growth of the lithographic industry."

Mr. Makarius admitted that new developments in presses may be initially expensive, but declared that they are profitable in the long run. The more notable of these are improved dampening systems; copperized rollers; ink repellents to avoid the marking problem and improved continuous feeds to insure uniformity, which is often lost with recurrent stops and starts.

The tendency among lithographic owners and management to resist changes which can mean real progress, was questioned by Mr. Blank. "The big obstacle seems to be that most lithographers do not like the responsibility and problems which go along with change.

"It is very important to replace worn equipment with newer, more efficient equipment to insure the continuance of a profit as well as to maintain a valuable plant equity. A dollars and cents presentation usually

The Vancouver, Canada, skyline as photographed by Dennis Rowedder. In continuous-tone work—with either black-and-white or color art—Ilford's N.30 emulsion produces clean, sharp negatives and positives of outstanding fidelity to every tone value.

ILFORD N.30 F.G.O.+.010" PB=DS

Translated, this "formula" means that Ilford's widely used commercial emulsion, N.30 *F*ine *G*rain *O*rdinary, is now available on Type F.010" *P*olystyrene *B*ase to insure maximum *D*imensional *S*tability. It will also continue to be available on thin and regular tri-acetate base.

The new polystyrene base provides the dimensional stability necessary in close register color work and thus widens the usefulness of an emulsion noted for its wide middle tone range.

N10.30 is especially recommended for continuous tone gravure positives and monochrome negatives, and in the lithographic field for continuous tone negatives and positives. In every use it follows copy superbly.

Try this new film on your next tough job and judge for yourself. Your regular graphic arts supplier has it—or can get it for you.

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Award Winners in SGAA Exhibit

Following are award winners in the 20th annual Exhibit of Southern Printing, displayed at the SGAA meeting:

ANNOUNCEMENTS AND INVITATIONS: Award of Merit—Douglas Printing Co., Inc. Honorable Mention—S. C. Toof & Co.; BUSINESS CARDS: A. M. —The Egan Co. H. M.—E. S. Upton Printing Co.; BUSINESS FORMS (snap-out, records, etc.) A. M.—Southern Business Forms Corp. H. M. —M. G. Lewis Printing Co.; CERTIFICATES: A. M.—E. S. Upton Printing Co. H. M.—The Paragon Press; BUSINESS STATIONERY (Matched sets): A.M. and H.M.—S. C. Toof & Co.; LETTERHEADS (Letterpress or Lithographed): No Award; LETTERHEADS (Engraved): A.M. and H.M. —S. C. Toof & Co.; POSTCARDS: A.M.—The Parthenon Press. H.M.—Western Lithograph Co.; GREETING CARDS: A.M.—R. M. Rigby Printing Co. H.M.—Western Lithograph Co.; POSTERS: A.M.—Litho Krome Co. H.M.—R. M. Rigby Printing Co.

POINT OF SALES DISPLAYS: A.M.—Commercial Printers, Inc. H.M.—Fetter Printing Co.; STATE, CITY AND NON-PROFIT INSTITUTIONAL PROMOTION & PUBLICITY: A.M.—Rose Printing Co. H.M.—Democrat Printing & Lithographing Co.; FOLDERS: A.M.—Mercury Lithographing Co. H.M.—Robinsons Printers, Inc.; SALES CAMPAIGN (3 or more pieces): A.M.—Western Lithograph Co. H.M. —Litho-Krome Co.; BOOKLETS AND BROCHURES: A.M.—Mercury Lithographing Co. H.M.—Western Lithograph Co.; MANUFACTURERS' CATALOGS: A.M.—Courier-Journal Lithographing Co. H.M. — Commercial Printers, Inc.; DISTRIBUTORS' CATALOGS: A.M.—Democrat Printing and Lithographing Co.; MAPS: A.M. and H.M.—R. M. Rigby Printing Company; INSERTS (package and mailing): A.M. and H.M.—Litho-Krome Co.; LABELS (package and wrapper): A.M.—Douglas Printing Co. H.M. — Press of H. N. Cornay; LABELS (Die Cut): A.M.—Courier-Journal Lithographing Co. H.M.—Democrat Printing and Lithographing Co.; BOX COVERS: No Entries.

COLOR PROCESS PRINTING (Lithographed): A.M. and H.M.—Litho-Krome Co.; COLOR PROCESS PRINTING (Letterpress): A.M.—Williams Printing Company; CALENDARS: A.M. and H.M.—R. M. Rigby Printing Co. H.M.—Paragon Press; PRINTERS' OWN ADVERTISING: A.M.—S. C. Toof & Co. H.M.—Douglas Printing Co.; ANNUAL REPORTS: A.M. and H.M.—Western Lithograph Co.; BROADSIDES: A.M.—R. M. Rigby Printing Co.; PROGRAMS: A.M.—The Egan Co. H.M.—Western Lithograph Co.; HIGH SCHOOL ANNUALS: A.M. — Journal Printing Co., Inc. H.M.—Benson Printing Co.; COLLEGE ANNUALS: A.M. and H.M.—Benson Printing Co.; BOOKS (Cloth Bound): A.M. and H.M.—Kingsport Press, Inc.; HOUSE ORGANS AND PUBLICATIONS: A.M.—The Parthenon Press and Western Lithograph Co. H.M.—Fetter Printing Co.; MENUS: A.M.—Western Lithograph Company. H.M. —Rose Printing Co.; GRAND AWARD: Kingsport Press, Inc.

SGAA

(*Continued from Page 49*)

the convention. Top award went to Kingsport Press, Kingsport, Tenn., for the volume, *The Index of American Design.*

The association reelected A. A. Wade, S. B. Newman Printing Co., Knoxville, as president for the coming year. Continuing with him are Harold W. Braun, Fetter Printing Co., Louisville, 1st vice president; W. Allan Blythe, Westerfield-Bonte Co., Louisville, 2nd vice president and Charles E. Kennedy, secretary-treasurer.★

convinces management that more efficient equipment, materials and procedures will pay for themselves and make a greater profit."

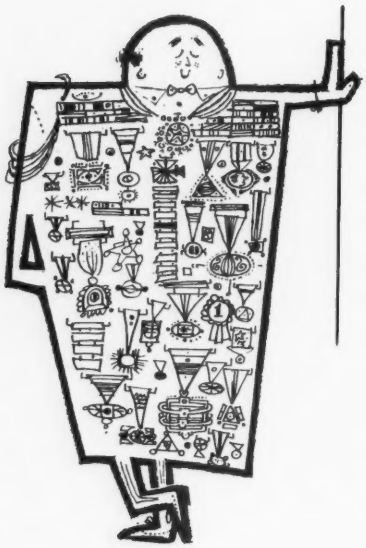
As an example of this lethargy, Mr. Blank cited the many lithographers who do not put neutralizers, or static eliminators on their presses and who subsequently lose time when they are unable to feed loads of paper because of press and paper static.

In conclusion he said, "It isn't enough to learn about these improvements and perhaps discuss them briefly and then do nothing about them. For to do nothing about improvements which can help your operation, is the same as never having learned about them."

Mr. Whyzmuzis discussed the

The Best Place to Pin a Medal ...Is on Yourself

(AND YOU CAN DO IT, TOO!)



Managing a litho business is not the easiest job in the world. To do it successfully and *profitably* calls for every available managerial aid.

Over 1100 NAPL members agree that membership in NAPL opens a huge store of services, ideas, business facts and aid — exactly the things you need and can use.

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We have a hunch NAPL membership can be a big help to us. Will you please send details?

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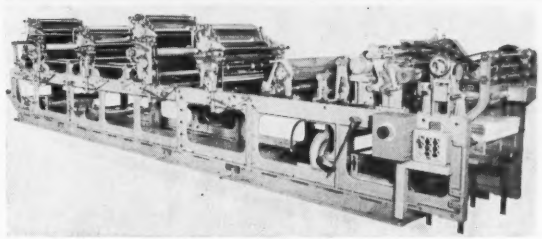
WEB-OFFSET

(*Continued from Page* 38)



also be designed for business forms work. It takes a 24″ web and can be obtained in 17, 17½, or 18″ cylinder circumferences. Either a sheeter or a rewinder, or both can be obtained. For forms work, the press can be equipped with numbering, perforating and punching equipment. The press can also be equipped with slitters, imprinters, and a stack flagger. For newspapers, a roll-fed collator is available.

Webendorfer
Saugatuck, Conn.

John F. Webendorfer joined American Type Founders in 1938. However, his son still custom designs and builds presses. His experience with web presses began in 1918 when he joined the Webendorfer organization.★

(Conclusion)

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various forward steps in the ink industry among which are vehicles of higher refractive index, better drying inks, higher gloss inks and magnetic inks.

"The ink chemist, in formulating inks, has more or less critically balanced the chemical and physical drying mechanism," he stated. "This means that the addition of driers, compounds, varnishes etc., should not be attempted at the press without first consulting your ink supplier."

He advised close cooperation with ink suppliers as being mutually advantageous. "It is next to impossible to report by phone that the ink did not work and have the chemist calmly write out a new formula."

The importance of steady progress in lithographic procedures and equipment, rather than immediate success was emphasized by Mr. Webber. "While there are few miracles to be expected, steady progress is the order of the day."

Among the new steps being worked on now by LTF are research on an improved Nicohol treatment to prevent blinding of deep-etch plates; research on the interelationship of paper and paper color, ink and ink pigments and color separation and masking techniques; research on zinc plates and research on finding a substitute for gum arabic in deep etch coatings and plate desensitizers.

"The really important thing," he said, "isn't what we are working on or what we expect to do in the future, but to what extent you are using today those things which research has made available to you.★

HEDGING

(*Continued from Page* 51)

and equipment are frequent and important, emphasizing the problems of obsolescence.

This is the picture of an industry where accurate costs and accurate income determination are of the utmost importance. Costs, particularly costs used for estimating, are not mere accounting or statistical computations. They may be matters of corporate life or death. A small shop may calculate its costs on the basis of presses and equipment bought 20 or more years ago. They still run and turn out a fairly acceptable product. They are all written off. No cost for depreciation shows on the books.

The owner, deceived by conventional accounting, thinks he can quote on the basis of a cost which not only underestimates depreciation, but ignores it. He can, on that basis, underbid his competitors, even though the competitor has better equipment. He also pays taxes on these apparent profits. The time will come, however, when he will be faced with the necessity of buying new equipment or going out of business.

Everyone in the industry knows how much the cost of printing, lithographing, binding or any other equipment used in the industry has risen. When we look at individual items of equipment they seem to have increased in price more rapidly even than the general decline in the value of money would indicate.

If a businessman has been continually understating his depreciation and overpaying his taxes, he will not be able to find the money within the business to replace equipment when he is forced to consider this.

A large part of what is called retained earnings is in reality only an improperly described portion of the depreciation reserve.

The amounts which should have been set aside for depreciation were erroneously treated as profits. Tax was paid on them and in many cases all or part of what was left was dis-

tributed to stockholders.

The only way the business can continue in a situation like this is to borrow money or to sell stock in the company. Anyone who has tried to do this in a business, say with a net worth of a million dollars or less, knows that it is almost impossible to do so on any kind of reasonable terms.

If the business can make a profit on the basis of the costs of new equipment, then it might be possible to enter into some sort of a leasing arrangement for new equipment. This has, of course, some of the characteristics of borrowing, but arrangements of this sort can frequently be made when borrowing is impossible. Insurance companies and other institutional lenders look upon these transactions with some favor when they can be supported by a good corporate history of earnings.

Renting equipment is one answer to the inflation problem. The lessee pays his rent in current dollars and therefore puts the cost of using the leased equipment on a current basis. However, the fact that in some cases a businessman can, in effect, start over again, on the basis of renting his equipment, does not change the fact that he has overpaid his taxes and exhausted his capital in the past.

Some reform in the calculation of depreciation for federal income tax purposes is essential. The best and, perhaps, ideal method would be to allow depreciation each year on the current value of the machinery and equipment owned by the taxpayer, but there seems little possibility that legislation to carry this into effect could be passed.

What does seem possible is something which will have the effect of accelerating, on one basis or another, the deduction of depreciation. Obviously the shorter the period the less will be the impact of inflation. What seems to be the most logical method is reinvestment depreciation which, in effect, provides for current value depreciation in arrears as and when equipment is retired. Frederick T. Marston of the Kaumagraph Company testified in favor of this method at the hearings before the Ways and Means Committee in January, 1958.

Another method advocated is similar to the Canadian system in which the taxpayer is given a choice, within certain limits, of the life which he will put on his plant and machinery. Under the Canadian system printing and lithographing equipment would come under Class 8, which includes everything not covered by certain other special classes and includes virtually all equipment and machinery in general commercial use, on which a rate of 20 percent is allowed. The U.S. rates on similar items vary from 4 to 10 percent, mostly at the lower end of the scale.

Another method which has been proposed is to grant substantial writeoffs in the first year, say 20 to 30 percent with depreciation calculated on present useful lives on the balance. This is quite similar to the method used in Great Britain.

Any of these reforms in depreciation would be valuable. Obviously they are not competing nor mutually exclusive. Reinvestment depreciation could very well be combined with a revision of useful lives. A number of industries, large and small, are working on this and lithography is among the group. The LPNA has been very cooperative in this work.★

DAHLGREN

(*Continued from Page* 33)

by a rheostat. The speed is set to meet dampening requirements, and once adjusted, usually remains constant no matter what the speed of the press. Normally, the surface speed will be from 25 to 50 percent less than the surface speed of the plate cylinder.

Since the first ink form roller must run at exactly the same surface speed as the plate cylinder, there must be considerable slip between rollers No. 1 and No. 12. Slightly unorthodox you say — and what do we do about the friction caused by one going faster than the other? Nothing, says Dahlgren. There is no appreciable friction, because the thin film of water on No. 12, the metal roller, separates the two surfaces just as a

lubricant does when a shaft runs in its bearings.

The Dahlgren system, as shown in *Figure 4*, is very simple — there are fewer rollers and it takes up considerably less space than the conventional dampener.

Additional advantages are the following:

1. No water-absorbent materials, of any kind, are used in the system. This means that control is not subject to possible inconsistencies of these materials and there is no cloth dampener which can transfer lint to the plate.

2. There is an immediate response to the water control when the rheostat is moved for more or less water.

3. There is a continuous feed of water to the plate, eliminating surges or interruptions which might result from a ductor action.

4. The water and ink balance is obtained immediately after shutdowns of any duration.

5. There is no need for lateral adjustment, as is customary when running short sheets, or as affected by heavy solids in localized areas.

6. The pressman can shift from a black to a yellow without changing dampener rollers.

7. Quality is better because the water control is better.

Summary: Two Basic Steps

Now let's review. The Dahlgren system was developed in two stages.

1. *The first step is to feed water to the first ink form roller using a conventional dampener unit.* (*Fig.* 3.)

This system is in operation on 30 presses, running in 12 plants. The results are generally good—the plant operators and pressmen are generally enthusiastic. Reports from LTF are very favorable, prospects are very encouraging.

2. *The second step is a simplification of the first. The conventional system is eliminated -- water is fed by a single rubber roller. (Figure 4.)*

The original working model has been in daily operation for five months. Two additional units are installed on a 25 x 38" two-color press. Good color work is being produced and sold.

Dahlgren Dampening Systems have been ordered by major press manufacturers. New presses will be equipped with them as optional equipment and installed in the field.

Developed at first for medium size sheet-fed presses, the range is being extended to include web-fed and other press sizes as rapidly as possible. However, availability is limited and will be for some time to come.

Acting as a reporter, I feel that there are many indications that this is a "breakthrough" in dampening. Better work should be possible at less cost. The litho press has been simplified. Can it be that our prayers for an improved dampener have been answered?★

LETTERS

(*Continued from Page* 18)

pressing appreciation to MODERN LITHOGRAPHY for the cooperation given us during 1958.

We are indeed grateful to you for the publicity given LTF, which is so helpful to us in our efforts to improve the lithographic process.

William H. Bulkeley,
President, LTF

Source of Enlightenment

Dear Sir:

". . . The articles in MODERN LITHOGRAPHY are a constant source of enlightenment to us. The magazine receives wide circulation throughout our plant and office."

P. N. Piper,
S. C. Toof & Co.,
Memphis

Web-Offset Series

Dear Sir:

I have read with great interest and pleasure the recent articles on web-offset (concluded in this issue) appearing in MODERN LITHOGRAPHY. I do ready-for-camera art and pasteup for all types of photomechanical reproduction and am enclosing herewith six catalogs which I completed in the past three months. They were printed at Spartan Press, Sparta, Ill., a Division of World Color Corp.

You will note that I used one color printer for each of the catalogs and three different black printers. . . . Considerable money was saved by this procedure.

I enjoy your publication very much.

Fred A. Kurtzeborn,
St. Louis

The catalogs are very nicely done and indicate the flexibility of the web-offset press for this type of work.—*Editor.*★

TECHNICAL BRIEFS

(*Continued from Page 63*)

layer, e.g. Se or Cu_2O. The conducting layer is connected with an electrode and a wetted paper which, on one side, is in contact with the photoconductive layer and, on the other side, with a metal plate (Cu or Fe). This plate and the electrode of the conducting layer are connected electrically. Upon radiation with light or x-rays, a current is generated which causes ions to flow into the paper thereby producing a color change.

THE 15° PATTERN IN MULTICOLOR PRINTING. D. Tollenaar. *Journal of Photographic Science*, Vol. 6, No. 4, July/August 1958, page 119. Proof is given that the use of a 133-line screen in combination with 120-line screens cannot eliminate the 15° pattern but eliminates a compound pattern caused by two 15° moiré's.★

CHICAGO SHOW

(*Continued from Page 41*)

publisher's name," he remarked, "has slid around to the back cover or has vanished."

Commenting on textbooks, Mr. Bender conceded that they challenge the ingenuity and resources of designers and production men. But, he added, "This reviewer cannot believe that the use of color for no particular reason and the inclusion of 50 percent more illustrations than the other fellow, constitutes good design in textbooks . . . There are too many overdesigned textbooks today."

One of the "books you can't help picking up," as Mr. Bender expressed it, is the facsimile copy of the famous and rare *Kelmscott Chaucer*, edited by William Morris, with 87 woodcuts drawn by Edward Burne-Jones. Only a lithographer could produce a facsimile like this and the publisher, World Publishing Co., Cleveland, turned the job over to Copifyer Lithograph Corp., Cleveland. This is a massive volume of 576 pages, each reproduced photographically, but reduced slightly to 8-11/16 x 12¾". A glossary and other material have been added and, Mr. Bender declared, "the result is something of a triumph in book making."

Among novelty books winning a place on the honor list was *The Birthday Angel*, lithographed by Rand McNally & Co., with Container Corp. of America cooperating. It is described as "a sort of toy book," with a printed cardboard insert which can be removed and assembled into a three-dimensional figure of an angel.

Another novelty book is the 48-page *I Went To the Animal Fair* volume printed by Copifyer of Cleveland for World Publishing Co.

First public showing of the books was made in the Chicago Public Library, May 1-31. The exhibit will also be shown in college and university libraries, and public and state libraries in 14 cities.★

STA

(*Continued from Page 40*)

perial Lithographic Co., of Milwaukee.

Judges of the contest were Leo King, creative director, Edw. H. Weiss Advertising Agency, Chicago; Carl Regehr, design director, Bert Ray Studios, Chicago; and Edward Katz, Crafton Graphic Co., New York litho firm.

In their random comments, the judges commended "the healthy, professional trend" to the entries, with "gimmicks not used for themselves alone, but to point up the basic idea." One judge, not identified, complained that "nothing seems particularly new, but with all designers reading the same things and seeing the same exhibits, everyone is influenced by everyone else and there is evolved a set of 'universal symbols.' This is not bad but it leads to conformity."

There was agreement that annual reports "are surprisingly well-designed and printed, considering that they are generally done under pressure." The judge who praised the abundance of offset winners and asked about letterpress also remarked that the silk screen process has great design possibilities. He was impressed also by the fact that, as he expressed it, "the different qualities of paper are still not being taken advantage of."★

•

SAUL BASS, graphic and industrial designer, has moved his studio to 7758 Sunset Blvd., Los Angeles 46.

CLASSIFIED ADVERTISING

All classified advertisements are charged for at the rate of ten cents a word, $2.00 minimum, except those of individuals seeking employment, where the rate is five cents a word, $1.00 minimum. One column ads in a ruled box, $10.00 a column inch. Check or money order must accompany order for classified advertisements. Address replies to Classified Advertisements with Box Number, care of Modern Lithography, Box 31, Caldwell, N. J.

HELP WANTED:

EXCELLENT OPPORTUNITY for qualified color stripping foreman plus dot etcher in modern midwestern trade plant. Inquiries will be kept strictly confidential. Address Box 555, c/o MODERN LITHOGRAPHY.

OFFSET STRIPPER. Top quality craftsman experienced in two and three-color work. Excellent working conditions. Top wages plus overtime. Write or call collect. Printing Service Co., 652 S. Main St., Dayton 2, O.

OFFSET DEPARTMENT FOREMAN — Young, fast growing Flushing, N. Y. company requires the services of a man who is a strong supervisor and organizer with offset experience. Our field is metal printing, however, experience in this specific area is not necessary. A good future with a solid small company is assured. Write in confidence to Box 390, Flushing, N. Y., with complete background and salary request. Our personnel know of this ad.

WANTED, EXPERIENCED OFFSET PRESSMAN who takes pride in his work. Permanent position, top pay and excellent working conditions in an open shop known for its high quality color work. Our plant is located in one of the largest and fastest growing industrial cities in the South. Please send detailed resume of experience to Box 558, c/o MODERN LITHOGRAPHY.

FILM TECHNICIAN—Have position for film technician, Southwestern territory. Job requires demonstration of film and proprietary chemicals. Must travel! Address Box 561, c/o MODERN LITHOGRAPHY.

FOR SALE:

COMPLETE OFFSET PRINTING EQUIPMENT: All machinery practically new. Harris 23 x 30" offset single color auto. feed roll. Rosback three-head automatic stitcher. Baum folder No. 333, 25 x 38"; temperature control sink, etc. Must be seen to be appreciated. Can be bought individually. National Photolithographic Corp., 4th & Market Sts., Chester, Pa. TRemont 6-4544.

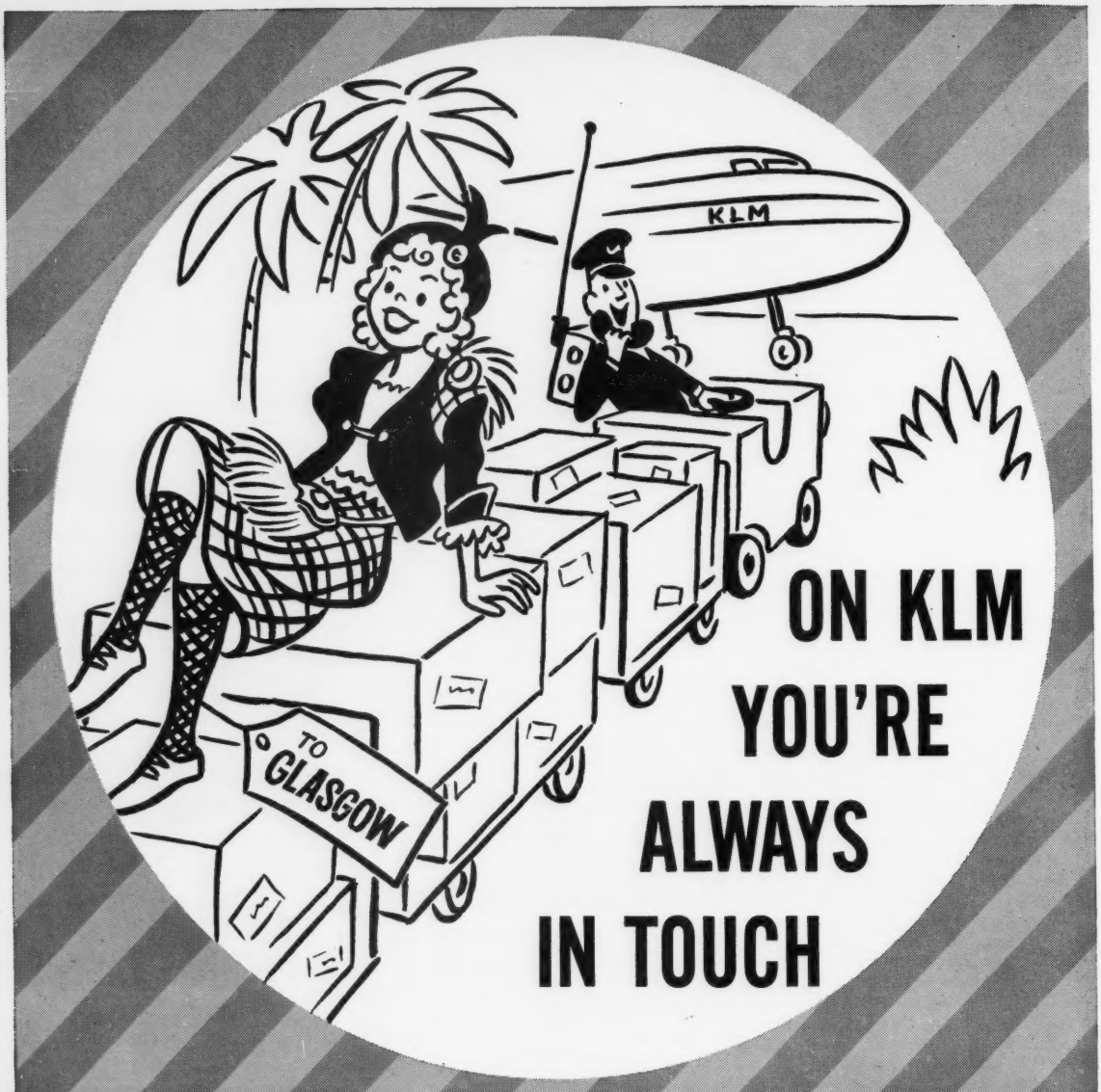
HARRIS—LTN HARRIS, Complete—excellent condition. For details write Box 556, c/o MODERN LITHOGRAPHY.

FOR SALE—$50,000 to $80,000 PROFIT POTENTIAL—Controlling interest going concern over 9 years, with top cost, financial, statistical, accounting and production "know-how", experience and reputation. Relatively very nominal cash investment required, but need proved high-caliber executive-level management, experience, to coordinate with sales, and working capital to integrate, really cash in on built-up good will and expand in era of "fabulous sixties" ahead in fast-growing Great Southwest. Address Box 557, c/o MODERN LITHOGRAPHY.

VARI-TYPER TYPE FACES, WHO ELSE wants to save 70 per cent? Your name in margin brings illustrated. Free Trial. Adamm Co., 1425L Thieriot Ave., New York 60, N. Y.

SITUATIONS WANTED:

JOURNEYMAN PLATEMAKER AND PHOTO-COMPOSING OPERATOR. Twenty-five years experience making all



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types plates and operating Rutherford and Lanston machines. Now employed, but wish to re-locate in North or Northwest. Address Box 559, c/o MODERN LITHOGRAPHY.

OFFSET COLOR CAMERAMAN—13 years experience in trade shop. Masking experience with or without handwork. Want to relocate in West or Southwest, U. S. Address Box 552, c/o MODERN LITHOGRAPHY.

WANTED: A progressive lithographer who is looking for a technical specialist to assume responsibility for plant improvement in methods, standards and control, with emphasis on color. Box 553, c/o MODERN LITHOGRAPHY.

TECHNICAL REPRESENTATIVE: qualified technician available to supplier or manufacturer as technical representative or troubleshooter. Practical experience in photography, platemaking, color reproduction, in-plant training and quality control. Address Box 554, c/o MODERN LITHOGRAPHY.

MISCELLANEOUS:

WANTED—Flat-bed metal decorating press —state size, condition and price. Address Box 560, c/o MODERN LITHOGRAPHY.

LOCAL BUYERS GUIDE

Advertising rates in the Local Buyer's Guide are: $7.50 per column inch. Please mail copy and check or money order to Modern Lithography, P.O. Box 31, Caldwell, N.J.

Confer on Zoning Plan

Representatives of the New York Employing Printers Association and members of the Zoning Board of New York met May 6 to discuss the problems which have grown out of a proposed zoning revision.

NYEPA spokesmen pointed out to zoning project director, John C. Smith, that 50 percent of the printing companies in the city are located in areas where printing would not be permitted if the proposed plan were adopted.

The industry spokesmen further pointed out that, since a printer must deal directly with his customers, many printers have located in the commercial areas in order to provide better service. The proposed zoning plan would seriously impair the competitive position of the printers affected, by denying them expansion and restricting their operations.

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Correction

In the April issue of ML it was mistakenly stated that F. L. Wurzburg was returning to the Printing Ink Division of Interchemical Corp. to take charge of sales. However, actually Mr. Wurzburg's responsibility is limited to sales of IPI Everyday inks, IPI Speed King letterpress and litho inks and other prepackaged inks.

Numbering Unit for Checks

A high-speed numbering machine 5/8 of an inch in width, designed

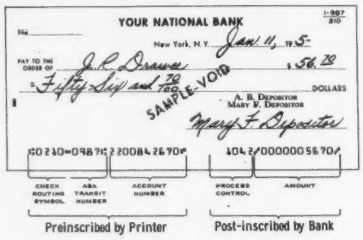
especially for large volume continuous printing of electronically processed checks and documents, was introduced last month by Wetter Numbering Machine Co., Brooklyn, N. Y.

Called the Miniature, the unit fills the need for a compact unit to number checks imprinted with encoding data for electronic reading, according to the company. The Miniature has a one-piece frame and "T" slotted bottom plate for increased strength.

ELECTRONIC READER

(*Continued from Page 72*)

speeds up to 900 a minute, according to IBM. The equipment is based on the American Bankers Association's specifications for a "common lan-



guage" — a form of printing with magnetic ink which can be read either by men or machines.

IBM has introduced several new machines for handling checks.

One machine imprints checks with special magnetic numbers and symbols showing the amount of the check and the bank's processing code. Blank checks, as delivered to each customer, will be set up for electronic processing by having account and banking code numbers already inscribed in magnetic ink near their bottom edges. These magnetic characters—representing account numbers, amounts, processing codes, etc.—generate electronic signals for automatic sorting and accounting.

Another of the IBM machines sorts and reads checks automatically and passes information on to electronic computers or accounting systems.★

COMPARATOR

(*Continued from Page 72*)

larities in magnetic ink printing.

It is suitable for "go-no-go" measurements of character dimensions, and is also useful for observing such factors as coverage, voids, extraneous inks, etc. It is convenient for a pressman or operator to carry with him for checking irregularities or fuzzy, saw tooth effects on the characters of the E 13/B magnetic type that may cause noises in the electronic "reader."★

INDEX to ADVERTISERS

(The advertisers' index has been accurately checked but no responsibility can be assumed for errors or omissions.)

TALE ENDS

IF YOU can do four-color lithography with only three colors, why can't you drive a four-wheeled automobile with only three wheels? That seemed to be the philosophy of two daring New York lithographers who tried their theory last month on New York's busy West Side Highway.

Fortified by 11 Scotches and four beers between them, the two found to their chagrin that their theory did not hold up in practice. Apparently enraged at their failure to pull off the stunt they vented their wrath (accumulated during a 12-hour shift in their shop) on two policemen who took special interest in the experiment.

The men had plenty of time to reexamine their ideas while awaiting arraignment on a variety of charges.

One of the pair recounted their drinking spree to police later. They had driven from a tavern with a flat tire, he recalled, which gradually disintegrated and left them riding on a rim.

Hickies were never like this.

•

Bill Clawson and Bill Bourquin, of the advertising and promotion staff of Harris-Intertype Corp. were guilty of a small—but clever— payoff last month. They sent us (and presumably others in the trade press) an official looking resolution acclaiming us for our "foresight and good judgment" in recognizing the newsworthyness of a recent publicity release from the company.

Attached to a gold seal and blue ribbon was a shiny new dime, good, as the resolution advised, for "one cup of coffee at any low-priced lunch counter."

Such unbounded generosity, we were musing a few days later, is quite overwhelming to us lowly editors, but just then our coffee cup really ranneth over. Flushed with their own altruism, apparently, Messrs. Clawson and Bourquin had sent us a *second* resolution, replete with a second shiny new dime!

Spring seems to be travel time for people in our industry. Mr. and Mrs. Frank Harman, owners of Harman Color Plate, Los Angeles, flew by jet to New York recently to visit litho shops in the area. From there they are driving to the TAGA meeting in Rochester, to be followed by a post-convention trip to Montreal, Toronto, Chicago, Milwaukee and thence westward to the coast.

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Also on the go recently was Herb Sayers, of Sayers Printing Co., St. Louis, who enjoyed an extensive European trip, buying a foreign car on the return trip.

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A really handsome addition to the already well-stocked trade press of the graphic arts is a new monthly from England called *The Litho-Printer,* which has just completed its first year of publishing with a nice looking issue that includes articles on color scanners, web-offset, presensitized plates, and fitting offset blankets. There isn't any news section, to speak of, but the feature articles are all excellently done. J. E. Reeve Fowkes is editor and the address is 97 Jermyn St., London SW 1.

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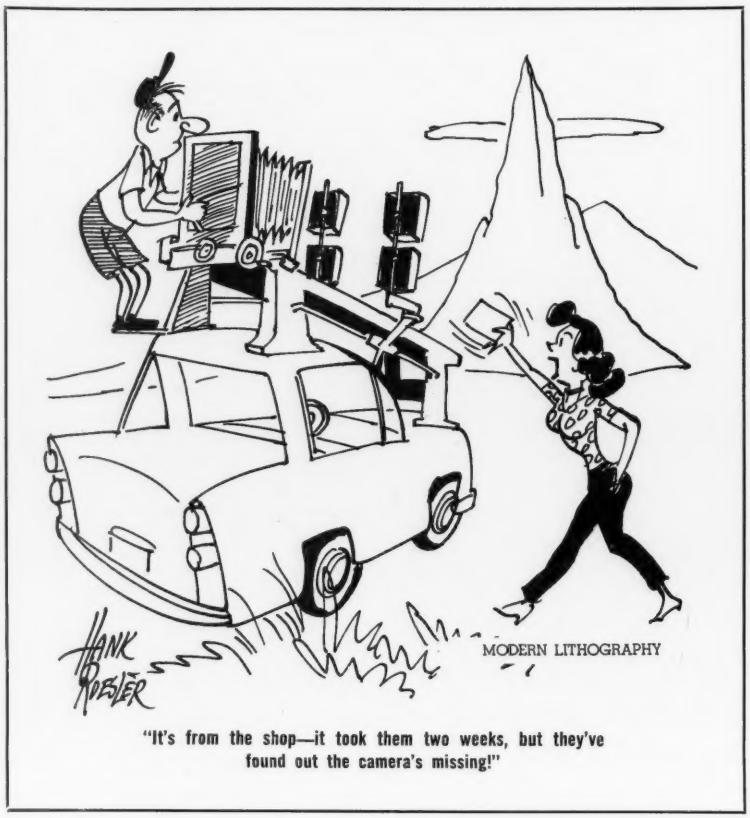
Lithographers are urged to be on the lookout for these desperate hombres: "Bad" Plate, "Whitey" Hickey, "Miss" Register, "Curley" Stock, "Bad" Maskerson (bad pun), "Off Color" Pete and the entire plate gang, including "Scummy," "Scratchy," "Sensitive," "Blind," "Dirty," and "Kinky."

If you encounter any of them, don't *call Gang Busters. Report to the Southwest Litho Clinic, where they will all be corralled and hung June 19-21 at the Hotel Adolphus, Dallas.*★



"It's from the shop—it took them two weeks, but they've found out the camera's missing!"

"With **Cromwell** Offset Packing, You Never Guess"

Les Olsen, veteran offset foreman at D. F. Keller Company, specifies nothing but Cromwell offset packing. Here he tells the reason why:

"You always *know* your printing pressure is right when you use Cromwell offset packing, because its caliper never varies across the sheet or from sheet to sheet. We require a printing pressure equivalent of .004". With *Cromwell* packing, we require sheets in only two calipers to build up our packing to the required pressure equivalent. We never have to guess or lose time repacking. The time we save more than pays for small cost of the packing."

Take a tip from this veteran, and always use Cromwell offset packing!

- Cromwell offset packing is available in 11 calipers from .002" to .020". All sizes are tailored to fit your press.
- You can buy any quantity from one ream up, in any size.
- Ask us for working samples. Test Cromwell offset packing at our expense.
- And remember... Cromwell uniform calipered tympan is best for your letterpress requirements, too!

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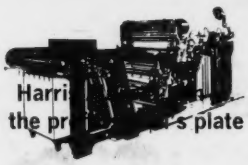
If it's on the negative, a Harris Alum-O-Lith plate will reproduce it. Accurately. Every dot. Every line. Like a mirror. This is true because Harris plates are STRETCHER-LEVELED to lay perfectly *flat* against the negative. This *total contact* of plate and negative results in total reproduction. No dot spread, no blur, no oil canning. Every detail comes through, even delicate shadings. Only Harris Alum-O-Lith TOTAL CONTACT plates deliver such professional results... job after job after job after job.



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